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Vol. 89

FEBRUARY, 1949

No. 2

AMERICAN BEE JOURNAL

# BABCOCK LEADS AGAIN!

*Completely*  
**PAINTED EQUIPMENT**  
**AT NO  
EXTRA COST!**



PAINTED WITH THE FINEST GRADE OF SNOW WHITE OIL BASE PAINT  
THIS EQUIPMENT WILL LAST FOR YEARS WITH A MINIMUM  
OF UPKEEP  
SAVES YOU LABOR, EXPENSE AND TIME  
TRULY A BEEKEEPER'S DREAM COME TRUE

## BABCOCK HONEY COMPANY

P. O. BOX 126

COLUMBIA 5, S. C.



**we're no  
HOGS**

**about it (profits)!**

**NO LONGER NECESSARY TO PAY PREMIUM PRICES FOR FIRST  
QUALITY EQUIPMENT**

**FACTORY TO YOU—MIDDLE MEN PROFIT ELIMINATED**

One complete single story hive, reversible wood cover,	each	\$5.50
	Per five	22.40
One complete single story hive, standard telescoping cover or with new "All Weather" cover	each	\$6.40
	Per five	25.40
Hive bodies, complete with frames	Per five	\$12.50
Hive bodies, empty	Per five	6.95
Shallow extracting supers with wedge top bar frames	Per five	8.50
Shallow extracting supers, empty	Per five	4.00
Section honey supers, complete with everything except sections	Per five	8.25
Standard reversible bottom boards, 100% cypress	Per five	5.45
Wood reversible covers	Per five	4.50
Metal telescoping covers	Per five	7.45
All weather insulated and ventilated covers	Per five	9.80
Ten frame, all wire electrically welded queen excluders, wood rims	Per five	5.00
	Per ten	9.50
4 1/4 x 4 1/4 x 1 7/8 Beeway sections, split 3 sides for inserting foundation easily. 28 of these sections are needed for each section honey super	Per 100	2.97
	Per 500	13.13
	Per 1000	26.15
DADANT'S THIN SURPLUS FOUNDATION for above sections, 25 sheets per lb. 7 sheets needed for each super	Price per lb.	\$1.25
	all thin surplus.	
DADANT'S THIN SURPLUS for shallow divided bottom bar frames as supplied in our supers. 22 sheets per lb.	Per 5 lbs.	5.95
	Per 25 lbs.	29.25
DADANT'S CRIMP WIRED brood foundation, 8 x 16 3/4 fits divided bottom bar frames in our hives. 7 sheets per lb.	10 sheets	1.75
	50 sheets	8.10
	25 lbs.	27.75
Folding wire veil	each	\$1.40
10" Hive tool	each	.80
Woodman Smoke Engine Smoker	each	1.80
Big Smoke Smoker with shield	each	2.45

For quick service order direct from this ad. Our complete free catalogue offers a complete list of everything for the beekeeper. All equipment supplied with divided bottom bar frames and in ten frame size unless otherwise specified.

**BABCOCK HONEY COMPANY**

**P. O. BOX 126**

**COLUMBIA 5, S. C.**

## NEED BEE SUPPLIES?

We have Everything the  
Beekeeper needs.

Sections

Supers with fittings

Hives and Frames

Foundation

Wire

and

all other supplies

WRITE FOR PRICES

**AUGUST LOTZ COMPANY**

MANUFACTURERS AND JOBBERS

Boyd,

Wisconsin

## 3-Band Italian Package BEES

Full Weight. Prompt Shipment. Young Bees

State health certificate with each shipment. Live arrival guaranteed. Replacement or refund made promptly upon receipt of bad order from your express agent.

1949 PRICES

WITH YOUNG LAYING QUEENS

Lots of	2-lb.	3-lb.	4-lb.	5-lb.
1-29	\$3.50	\$4.40	\$5.50	\$6.50
30 or more	3.20	4.00	5.00	5.90

Untested queens \$1.00 each.

Tested Queens \$2.00 each.

For queenless bees deduct \$1.00 each from above prices.

**JACKSON APIARIES**  
Funston, Georgia, U.S.A.

## FOR 1949 YOU WANT YOUNG HIGHEST PRIME QUALITY PACKAGE BEES AND QUEENS

Our droneless packages and  
young queens satisfy

Improved strain of three-banded Italians backed by over 25 years; careful selecting, breeding, and shipping to all points in U. S. A. and Canada. Our breeding and mating stock is carefully picked and tested out for the coming season each year from hundreds of best-by-test colonies, which gives you benefit of each season's improvements when buying from us.

We are booking orders for the season of 1949, plan your requirements for this coming season and place your order early, we are working each day from now on to fill your orders promptly with the very best of QUALITY by test, let us know of your 1949 requirements.

1949 PRICES

ORDERS BOOKED 20% DOWN PAYMENT, BALANCE  
DUE 10 DAYS BEFORE SHIPMENT

	Queen	2-lb. with Queen	3-lb. with Queen	4-lb. with Queen	5-lb. with Queen
1-24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25-99	1.30	4.25	5.30	6.35	7.40
100-up	1.20	4.00	5.00	6.00	7.00

Queenless packages deduct the price of queen.

**H. A. FARMER APIARIES**

Cottonwood, Alabama : Phone 2582

TELEGRAPH AND EXPRESS OFFICE,  
DOTHAN, ALABAMA

1896-1949

**IN 1949**

More beekeepers than ever before  
will be turning their attention to  
producing Comb Honey.

The price is right—the demand is good.

We can supply your needs in Comb Honey  
Sections—Section Supers—and all the  
equipment necessary for production of  
Comb Honey.

We are manufacturers and sell direct to  
the beekeeper.

Write for our 1949 catalog listing every-  
thing for the apiary at a price that is right.

**MARSHFIELD MFG. CO., Inc.**  
MARSHFIELD, WISCONSIN

(The heart of Wisconsin's Dairyland)



## Quality Italian Queens, Package Bees



Order early for preferred shipping dates.

**George Lott Apiaries**

Route No. 2, Baton Rouge, La.

## Grapefruit - Oranges

**RED BLUSH** Grapefruit \$3.50 a bushel. Pink-meated, seedless, tree-ripened. Tree-ripened Oranges \$4.00 a bushel.

**MIXED BASKETS** of Red Blush Grapefruit and Oranges at \$3.75 a bushel. All F. O. B. Brownsville. Express rates \$1.34 to \$2.58 a bushel, depending on your location. Reference, Dadant & Sons, Hamilton, Illinois, who purchase my fruit. Complete price list on request.

**EDWARD E. BARTLETT**

GROWER—SHIPPER

BROWNSVILLE, TEXAS

## Williams Italian Queens \$1.50 each

All queens clipped and marked. Shipping date starts April 15, 1949. 25% deposit holds orders. Balance 10 days prior to shipping date.

**DR. WILLIAMS APIARIES**

303 W. DEFE

BAYTOWN, TEXAS

## THREE-BANDED ITALIAN Package Bees & Queens

FOR 1949—Write for Circular

**Bessemer Apiaries**

4300 A Raleigh Rd. Greensboro, N. C.

## G. B. Lewis Wooden Goods !

**DADANT'S WORLD FAMOUS CRIMP WIRED FOUNDATION**—Their 85 years' experience is your safeguard. Catalogue on request.

**Dotson's Apiaries**

3059 W. Roxboro Rd. N. E., Atlanta, Georgia

## THREE-BANDED ITALIANS Package Bees and Queens

2-lb. pkg. with queen \$3.50; 3-lb. pkg. with queen \$4.50; 4-lb. pkg. with queen \$5.50. Only 20% down to book your order, balance 15 days before shipping date. Health certificate, and live delivery guaranteed.

**ROY APIARIES**  
HESSMER, LOUISIANA

## 3-Banded Italian Bees and Queens

2-lb. with queen \$3.50; 3-lb. with queen \$4.50; 4-lb. with queen \$5.50. Only 20% down, to book your order, balance 15 days before shipping date. Health certificate and live delivery guaranteed with each shipment.

**CLOVER BEE FARMS**  
HESSMER, LOUISIANA

**CHOOSE LABELS WISELY—  
A-B-J LABELS GET RESULTS**

## QUEENS—CAUCASIANS ONLY WHY CAUCASIANS?

### BECAUSE—

They have consistently produced larger crops of honey in my operations in three western states and the province of Alberta.

### BECAUSE—

They are gentler than any other race or strain in my experience. They can be kept in large apiaries without trouble in places one wouldn't dare keep other races.

### BECAUSE—

Caucasians have delivered the goods for me in the business of producing as large honey crops as possible with a minimum of trouble and effort. They can do the same for you.

Prices are \$1.25 each with 5% discount allowed on orders of 50 queens and 10% discount on orders of 100 or more queens.

**THOS. S. DAVIS, Rt. 7, Box 3914, Sacramento, Calif.**

Breeding **BETTER CAUCASIANS** for over twenty years.

## THE DIAMOND SPINNER



Pat. Applied For

'A Honey of a Moneymaker'

The last word in Stainless Steel honey house equipment. And why Stainless Steel?—not for it's enduring beauty alone, but **BECAUSE** it is easy to clean, sanitary and practically indestructible. Resolve now to derive the many benefits by the use of this indispensable machine.

Priced at \$225.00 F. O. B. complete with G. E. motor. Shipping weight 200 lbs.

## THE DIAMOND MATCH COMPANY

1300 PRODUCE STREET.

LOS ANGELES 21, CALIFORNIA

Or

APIARY DIVISION

CHICO, CALIFORNIA

Send for Catalogue of **DIAMOND** quality bee supplies.

## WOODMAN'S QUALITY BEE SUPPLIES A COMPLETE LINE— Send for over 350 listings

Woodman Honey Extractors last a lifetime and then some. One of our complications—not yours.

**A. G. WOODMAN CO., Dept. A, Grand Rapids 4, Michigan**



Queens

**SUNKIST  
Italian**

Packages

**MARCH PACKAGES A SPECIALTY.** Openings April and May. Guaranteed live delivery—Satisfaction. 10% books your order—balance 10 days before shipping.

	2-lb.	3-lb.	4-lb.	5-lb.	Queens
1-25	\$4.00	\$5.15	\$6.15	\$7.15	\$1.15
25-50	3.75	4.90	5.90	6.90	1.10
50-up	3.50	4.60	5.60	6.60	1.00

**SUNKIST BEE COMPANY**

Convent, La.

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February, 1949

Volume 89, Number 2

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HAMILTON, ILLINOIS

Managing Editor—G. H. Cale

Editors—M. G. Dadant, Frank C. Pellett, Roy A. Grout

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## Knight's

### THREE-BANDED LEATHER COLORED ITALIAN BEES

	Queens	2-Lb. Pkg.	3-Lb. Pkg.	4-Lb. Pkg.	5-Lb. Pkg.
1 to 24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25 to 99	1.30	4.25	5.30	6.35	7.40
100 up	1.20	4.00	5.00	6.00	7.00

The above prices include the queen with each package. For queenless package deduct the price of the queen.

Prompt service, full weight packages, young laying queens, safe arrival and your satisfaction guaranteed.

No Charge for Clipping

**JOHN T. KNIGHT**  
Hayneville, Alabama

## BE SAFE

By buying full weight packages of young **THREE-BANDED ITALIAN BEES**. As thrifty as any and a pleasure to work with. Health Certificate with each shipment.

We guarantee satisfaction and live delivery, also delivered on date you want them.

Queens are select, untested, reared by us, and shipped, caged with bees.

### PRICES

	Queens	2-lb. pkg. with queen	3-lb. pkg. with queen
1 to 24	\$1.15	\$4.00	\$5.00
25 to 49	1.05	3.75	4.75
50 to 99	1.00	3.50	4.50
100 up	.90	3.25	4.25

**HOMAN BROS.**

Rt. 2

Shannon, Mississippi

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## Italian Queens

VIA AIR MAIL  
WORLD ROUND

\$1.25 each U. S. A. and Canada

South America \$1.40 each

Europe \$1.70 each

You too can get quality queens in 1949  
by ordering here. Ask your neighbor.

(MISS) LENORA ANDERSON  
Samson, Alabama



ANNOUNCING  
1949 Prices on

## Package BEES

Due to continued increase in costs of all supplies and other items necessary to the production of PACKAGE BEES, there will be no change in price. Even though costs are up we are offering those same HIGH QUALITY packages at the same price as last year, as follows:

2-lb. with young laying queen ..... \$4.00  
3-lb. with young laying queen ..... 5.00

We hope to ship a few one frame NUCLEI this season. If you are interested in this type package write us.

"They Produce"

Rossman & Long

P. O. BOX 133  
MOULTRIE, GA.



## JENSEN'S "Magnolia State" ITALIANS

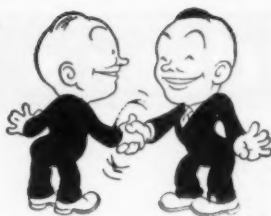
### PACKAGE BEES & QUEENS

Bees and queens of this strain have made an enviable record for use by satisfied customers among the better class of beekeepers in the United States and Canada, and several foreign countries as well.

We try always to stay abreast of new developments in breeding technique that will in any way improve our stock. If you have never tried any of our package bees or queens we urge you to give them a trial. We assure you, you will be pleased with the results; they produce.

PRICES:	Queens	2-lb. pkgs. with queen	3-lb. pkgs. with queen
1-24	\$1.40	\$4.50	\$5.60
25-99	1.30	4.25	5.30
100-up	1.20	4.00	5.00

**JENSEN'S APIARIES**



## Also—a New Type of Queen

### A THREE-WAY HYBRID

Now it can be told—"A Three-way Hybrid" Queen will be available this spring. Amazing results have already been achieved with them, and this only the beginning. Do not confuse the word "Hybrid" with the common cross between black and yellow bees. These Hybrids are the result of uniting three lines of Italians to form one outstanding line. PROGENY TESTED FOR HONEY PRODUCTION, RESISTANCE, GENTLENESS, AND OTHER DESIRABLE QUALITIES.

PRICES: 1-24, \$1.65; 25-99, \$1.55, and 100-up \$1.45 each. A limited number of packages of D. R. Bees will be available with these NEW QUEENS.

"The Business QUALITY Built"

**Macon, Mississippi**

## No! No! No! Don't let your wants hurt you!

When you need package bees and queens just remember the HUBER FOREHAND APIARIES. We have as fine a strain of Italian Bees and Queens as you have ever had. Just send your order and we will ship them on the shipping date you prefer.

ANY NUMBER	2-lb. packages with queens	\$4.00	WRITE FOR DEALERS' PRICES
● WRITE	3-lb. packages with queens	5.00	
● WIRE	4-lb. packages with queens	6.00	
● PHONE	5-lb. packages with queens	7.00	
	Queens	1.20	

**HUBER FOREHAND**

**Satsuma, Alabama**

## OUR PURE CAUCASIANS ARE ABSOLUTELY TOPS IN QUALITY, HONEY PRODUCTION, GENTLENESS

As we realize that our customers keep us in business we strive to serve them with only the best.

2-lb. package with queen	LOTS 1-10	\$4.40
3-lb. package with queen		5.50
QUEENS (each)		1.35

Health certificate furnished with each shipment and live delivery guaranteed.

**PINE BLUFF BEE FARMS**

(Caucasian Branch—  
Jesse E. Gooch & Sons)

**Route 3, Pine Bluff, Arkansas**



## SUPER FOUNDATION

The heart of comb honey is foundation. The biting quality of the honey, that delicate center taste is foundation. It must literally become a part of the honey, so tender, a touch of the tongue will crumble it; yet be so strong that bees work it out quickly and easily. Dadant's Surplus Foundation, fragrant and pure, thin and sweet, blends naturally with your finest comb honey, that your market grades are better and sales are quicker.

**DADANT AND SONS, Inc.**

**Hamilton, Illinois**



## RED STICK APIARIES & CO.

Member Louisiana Retailers  
Association

Twenty-eight Years Commercial  
Queen Breeder

### Disease Resistance Stock ITALIAN BEES & QUEENS

2-lbs. with spring bred  
laying queen .....\$4.00  
3-lbs. with spring bred  
laying queen ..... 5.00  
Extra queens \$1.25 any number

WHY PAY MORE FOR  
THE BEST

Main Office 113 Lee Ave.  
Telegraph Western Union  
DONALDSONVILLE, LA.

### WHITE PINE BEE FARMS

Jason B. Hollopeter, Rockton, Pa.  
NORTHERN BREEDERS OF  
Hardy, Honey Gathering Stock

Now booking orders for season  
which opens May 20, 1949

### PACKAGE BEES AND QUEENS

Prices	Pkg. Bees with Queens	2-Lb.	3-Lb.
1 to 24, .....	\$1.40	\$4.50	\$5.60
25 to 99 .....	1.30	4.25	5.30
100 up .....	1.20	4.00	5.00

We guarantee safe arrival. For larger  
packages write for circular.

### TAYLOR APIARIES

Box 249 Luverne, Alabama

### -HONEY WANTED-

CARLOADS AND LESS THAN CARLOADS  
Send samples and quote best cash price de-  
livered to us. All grades.

### HONEY SALES COMPANY

1806-08 No. Washington Ave.,  
Minneapolis 11, Minnesota

### QUALITY THREE-BANDED ITALIAN

#### PACKAGE BEES AND QUEENS FOR 1949

New and improved package delivers bees  
in better condition. Prices are right. A  
member of The American Bee Breeders  
Association.

### COTTAGE HILL APIARIES

RT. 2, BOX 64

MOBILE, ALA.



WEST COAST  
BEEKEEPERS  
Buy Quality  
Lewis-Dadant  
Products  
Out of Stock  
F. O. IRICK  
609 S. H. St.  
Tulare, California

# Honey is produced in hives

# Honey is sold in H-A jars

HAZEL-ATLAS GLASS  
COMPANY Wheeling, West Virginia



### LADY-LIKE CAUCASIANS CAUCASIAN APIARIES

Castleberry, Alabama

Breeders of the best in  
CAUCASIAN BEES AND QUEENS

QUEENS .....	\$1.40
2-POUND PACKAGES .....	4.50
3-POUND PACKAGES .....	5.60

Renew Your Subscription

February, 1949

Don't miss reading the Classified Ads

### 3-BANDED ITALIAN BEES & QUEENS

	1-24	25-up
2-lb. pkg. with queen	\$3.75	\$3.50
3-lb. pkg. with queen	4.75	4.50

Extra queens \$1.25 each

**J. P. CORONA**

BOX 124

KENNER, LOUISIANA

**1/4 OF 100 YEARS WITH CAUCASIAN BEES**  
Book you order now for  
**QUEENS & PACKAGE BEES**

Prices from April 10th to June 1st.

	Queens	2-lb.	3-lb.
1-24	\$1.40	\$4.50	\$5.60
25-99	1.30	4.25	5.30
100-up	1.20	4.00	5.00

Health certificate with each shipment and live delivery guaranteed. Folder free.

**BOLLING BEE CO.**  
Bolling, Alabama

**The HONEY SALESMAN**  
FALFA, COLORADO

A monthly, 16 letter-size pages Marketing information and a service to aid bulk honey sales. \$2.00 a year. Free sample copies.

1949  
**ITALIAN PKG. BEES & QUEENS**

2-lb. with queen	\$4.00
3-lb. with queen	5.00

**LOHMAN BEE CO.**  
Rt. No. 1, Box 340C Loomis, Calif.

SPRING OF 1949  
**ITALIAN BEES & QUEENS**

2-lbs. pkg. with queen \$3.50; 3-lbs. pkg. with queen \$4.50; 4-lbs. pkg. with queen \$5.50. 20% down, balance 10 days before shipping date.

**Napoleon Guillery Apiaries**  
Marksville, Louisiana

**PINARDS**  
Queen Bee  
Cages  
**A. B. PINARD**

Manufacturer  
1794 Hicks Ave.  
San Jose, California



Northern CALIFORNIA  
**Package Bees—Italian Queens**

Nuclei made to order. Prices are about 10% less than last year with the same high quality and service.

**D. N. BROWN APIARIES**  
BOX 2 GLENN, CALIF.

HIGH GRADE ITALIAN  
**Package Bees & Queens**

2-lb. pkgs. with queen \$3.75; 3-lb. pkgs. with queen \$4.75; 4-lb. pkgs. with queen \$5.75. Guaranteed full weight and prompt shipping dates.

**E. J. COCO, Hamburg, La.**

— Advertise in the A-B-J —

## Meeting of the Board of Directors of the American Honey Institute

The Board of Directors of the American Honey Institute met at 2:00 P. M. on December 12 with all of the directors present excepting the chairman, L. W. Parks, who was represented by his son, Steven Parks, of Watertown, Wis. The meeting was called to order by R. F. Remer, of the Sioux Honey Association, vice-chairman of the Institute, and a full report of the American Honey Institute's activities for the year 1948 was given by Director Harriett M. Grace.

As usual, even the Board of Directors were much surprised and pleased with the tremendous amount of publicity given to honey by the Institute. Concrete evidence was presented by several rolls of copies of reading notices and advertising that were carried in the various newspapers and magazines from nearly every state in the Union.

The total expenditures for the year amounted to more than \$16,000 with receipts only slightly more than that amount. The program for 1949 is such that the Institute shall need more funds than ever to carry the information about honey to consumers all over the U. S. A. Certainly for the amount of money expended, the American Honey Institute is doing a most wonderful work and beekeepers are getting more for their

dollar in advertising than could be realized in any other way.

During the past year the American Honey Institute carried paid advertising in the columns of the four following magazines: "Journal of Home Economics," "Journal of American Dietetic Association," "Hygeia," and "Forecast for Home Economists." The total cost of the advertisements appearing in these four journals was nearly \$5,000 but from the evidence submitted by Mrs. Grace the response to these advertisements was more than satisfactory.

It is intended to increase this advertising just as far as funds will permit and beekeepers and other people interested in the honey industry are urged to contribute liberally to the American Honey Institute.

The following directors were re-elected for three years: T. E. Burleson, Waxahachie, Texas; M. S. Stone, Los Angeles, California; A. G. Woodman, Grand Rapids, Michigan. Other directors whose terms did not expire are M. J. Deyell, Woodrow Miller, R. F. Remer, R. B. Willson, L. C. Dadant, and L. W. Parks.

The executive committee for 1949 will be the same as for 1948 and will consist of L. W. Parks, Watertown, Wisconsin, chairman; R. F. Remer, Sioux City, Iowa, vice-chairman, and M. J. Deyell, Medina, Ohio.

## Discussions--March-April

As this is written it is the twenty-fourth day of January, with the February number almost off the press, and not a single answer has been received from any reader to the invitation on page 17 of the January issue to partake in a discussion in the coming March number on a COMPARISON OF PACKAGE BEES WITH OVERWINTERED COLONIES IN HONEY PRODUCTION. We now propose a discussion for the April issue on RESULTS FROM THE USE OF POLLEN SUBSTITUTES OR SUPPLEMENTS.

Certainly both of these should interest readers. With good editorial help it is likely we can get the gist of what you may have to say in with the replies of others to make interesting articles on both subjects, one for March; the other for April.

Now, please sit down and do your best. No matter how you write what you have to contribute on either of these subjects, we can help you get it into print. If our readers do not see this invitation this time it won't be because it is so inconspicuous as to escape notice. Do your best.

## Queen and Package Prices, a Shipper's Viewpoint

Some honey producers seem to think that queen breeders and package shippers have an "oil well." They seem to think that queens and packages are a by-product which cost little to produce. To many shippers, the sale of queens and packages is their only income.

Much has been written on queen and package production, little has been said about costs. Visit any successful shipper. Look at his investment in trucks and equipment. Take a look at his gasoline supply and sugar bills. Notice all the help he has around. Think of the many months when there is little demand for queens and packages. Remember, if the shipper has the best help when he needs it, pay checks will have to be written many months when his labor will produce little or no income.

There are other costs that are very substantial. Look at the queen and package advertisements in this Journal. Estimate the cost. Where did the money come from? Think of the money a good breeder has to spend on stock improvement. What about postage, telegrams, phone calls and many other items? Many of these expenses amount to very little to the honey producer. To the shippers they are quite an expense. They have to be included in the price you pay for queens and packages.

Do you want your shipper to produce queens just as cheaply as he can? Shall he discontinue his breeding program and use any queen that has good COLOR as a breeder? If he did these things he could probably supply you with queens for a little less money. Next season, though, you would probably be looking for another shipper.

Roy S. Weaver, Texas.

## Honey Used for Ulcers

An item distributed by the Associated Press has been appearing widely in the papers and is sent to us by Arejas Vitkauskas, of New Jersey, on the use of honey in the treatment of stomach ulcers in the Soviet Union. About 250 patients suffering from ulcers have been treated. Approximately 250 grams of honey were given the patients for periods of fourteen to eighteen days. About 80 per cent of those treated have the ulcers healed.



### BETTER BEES

An entirely new type Queenbee for 1949—Six generations of controlled instrumental mating and careful research work has gone into the production of these Northern bred pure all Italian hybrids. Progeny tested for uniformity of better honey production, easy to handle, resistant to the foulbroods and other valuable qualities under standard commercial Apiary operations.

Shipments start April 1st. We have just a few packages headed by these queens left. PRICES:

QUEENS—1-24, \$1.65      25-99, \$1.55      100 up, \$1.40

WICHT APIARIES, 406 Miller Street, Hattiesburg, Miss.



### YOUR 1949 CROP

The pounds of honey per colony can be increased with good stock. Ask your friends about Bessonnet's stock if you have not used some. Prices:

Bessonnet Bee Company	Quantity	Queens	2-lb.	3-lb.
			Pkgs.	Pkgs.
DONALDSONVILLE, LOUISIANA	1-99	\$1.30	\$4.25	\$5.30
	100-up	1.20	4.00	5.00

## Italian Package Bees and Queens

FOR 1949

Quantity	1-23	24-98	99 and over
2-lb. package with queen	\$3.85	\$3.70	\$3.50
3-lb. package with queen	4.85	4.70	4.50
Queens only	1.25	1.20	1.15

For queenless packages deduct the price of queen. Packages are shipped express collect. Queens postpaid.

Terms: \$1.00 per package when order is booked, the remainder at least 10 days prior to shipping. Cancellations are in order at any time prior to actual shipping with full refunds made promptly.



### GIRARDEAU APIARIES

(Successors to M. Pettit)

TIFTON, GEORGIA

## THE HIVE AND THE HONEYBEE



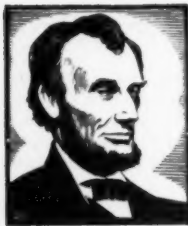
Here are facts you never knew before; here are things to do with bees you never read or tried. There is no other book like it.

In 650 big 6x9 pages, you begin with beekeeping history; the honey industry today; how to start with bees; locations; yard management through the year; honey sources; crop handling; honey selling; diseases and enemies of bees; honey as food; how to winter bees in new ways . . . modern beekeeping in every respect and step-by-step. Price \$4.00.

With American Bee Journal (1 year) \$5.00.

THE AMERICAN BEE JOURNAL : HAMILTON, ILL.





# • As We

## How About Embargoes?

IT SEEMS THAT THERE IS A GENERAL tendency, especially on the part of southern states to institute embargoes against the importation of bees on combs from outside states. This has created a condition under which the states that do not have embargoes are apt to suffer not only from an accumulation of undesirable "movers," but also from a concentration of bees coming from other states and overpopulating the territory.

Some embargoes have genuinely been put upon comb importations on account of the reaction from earlier diseased bees coming in either without certificate, or with a certificate which was unwisely issued or untruthfully used. Such cases, we believe, have been in the "rare" class.

Many of the embargoes, however, have been requested and imposed largely because of the overcrowding of areas through colonies and apiaries coming in from outside without any regard to beekeepers already in that locality. If an Illinois or a New York beekeeper drops into a locality "hit or miss" without any regard to established beekeepers he certainly can arouse the ire, not only of those beekeepers but of the authorities and at the same time be doing himself a bad turn through the consequent reduction of crops from overstocking.

However, it is a question whether embargoes are the solution. In the first place it has yet to be proven by the higher courts that such embargoes can be enforced legally. In the second place, if we are ever to retain our democratic system, we should guard against such actions as will impede our progress rather than advance it.

Much better would it be to make more stringent the provisions under which such movements can take place, like stricter and more definite regulations concerning disease inspection and permits. Also perhaps a quarantine of a month or more at the new location before further moves can be made. In the case of

locations certainly it would not be amiss to have a regulation by which it would be necessary for the mover to first announce his intended location, and allow sufficient time for the inspector to investigate as to whether the location can carry more bees before the permit to enter is issued.

Already one state where beekeepers depend upon irrigated sections for bee flora, has revised its rules from complete embargoes, to strict regulations as to entrance and placement of bees; and another (southern state) now has stipulations under which its apiary board and inspector have power to restrict importations until provisions of their apiary act are met. Both states seem to be well pleased with the results.

The unscrupulous will always present a problem, whether it is the local inspector who leans backwards to protect his local beekeepers, or the indiscriminate mover who "doesn't care a darn" whether he treads on anyone else's toes or not. Fortunately this kind is just about as scarce as the carousing beekeeper.

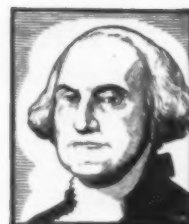
Surely our National Association of State Inspectors should soon be in a position to recommend at least, uniform laws regulating the movement of bees across state lines, whether they be on combs or combless.

## Poison and Poor Prices

M. R. INGELS, EMMETT, IDAHO, WRITES under this title, "Poison and Poor Prices for Honey Spell Ruin for Bee Industry," in the Emmett Index, for January 6. He writes us: "When I asked Editor Skinner if he thought I would get results from my letter (the article was a letter to Senator Miller asking for government help in the matter of insecticides and in price support for honey) he said he hoped I would but the beekeeper is on the wrong side of the fence. However it should be the duty of Government to do for the people what the people cannot do for themselves, in a time of emergency. Roosevelt did it in a depression by revaluing gold and



# See It •



silver, money and credit. It kept the people going. It can be done for us now."

In the published letter, Mr. Ingels says that seed producers should have to pay an adequate price to the beekeeper for the pollination service of bees; perhaps by a tax on the seed producer, that in turn might be used as price support for honey. Also if the use of chemical poisons continues unrestricted the bee population will go down so far that beekeepers will quit and bees will disappear and agriculture will suffer.

All this complex relationship is tough to solve. No one knows the correct way to start a solution. Maybe some control of insecticides is necessary to prevent unwise use of poisons; perhaps the rest of the job is one of continued education in the best interests of both the farmer and the beekeeper. As for price control, perhaps we should not seek more than enough by control of some sort to insure approximately the bare cost of operations; depending on our own efforts to so organize our industry that honey will eventually sell at a reasonable profit to the producer.

## Keep Your Crops Separate

ONE OF OUR GOOD SUBSCRIBERS HAS kept us posted on his 1948 honey crop operations. His crop has been good. Too good because there has been a white crop which unfortunately has been mixed all summer with honeydew. Being a good beekeeper he has endeavored throughout to separate his source honeys; that is, extract the honeydew and still allow him to get some of the fine white honey. His last report is that he will have 180 lbs. of the "dark article," then 100 lbs. of amber, and unless a white flow from alfalfa developed during the last three or four weeks of the season, no good white honey.

Here is a beekeeper who has made every effort to segregate his source crops but to no avail unless his late crop was good. But for every one of these we venture to say that there

are many who pool the crop; amber with white, when they might well separate them by judicious removal from the hives at the proper time. If the beekeeper has a local market for the mixture, well and good. There are some who would prefer it. But if not, the whole crop will have to take the price of the lowest grade, and unfortunately color figures more than it should in the general market price.

The Canadians are outstripping us in the matter of selection and grading of their honey. Here, outside of the expensive Pfund grader, which we understand is not available generally, we have nothing by which we can determine color alone. Government grading rules have meant very little generally. We need to grade our honey and as a first step we need to use a little more discretion and alertness in taking it from the hive so as to have selectivity as to source and color when we prepare to market the crop.

## Confusion of Terms

THE NOVEMBER 25, ISSUE BRITISH Bee Journal has an excellent editorial on the confusion of terms commonly used in beekeeping. It refers especially to the misuse of the words nectar and honey. We speak of the bees getting honey from clover or other plants when we mean getting nectar. We speak of honeyflow when we refer to the abundance of nectar coming to the hives. The nectar, of course, is the raw material from which honey is made.

Since the bees convert the nectar into honey it would hardly seem incorrect to say that they get honey from a particular plant from which the nectar comes. The dictionary in time comes to recognize the meaning in words which common usage gives. Reference to a "honeyflow" is so common and of such long standing as hardly to be changed to "nectar-flow" because of the objection of critical editors. When the bee-man refers to a honeyflow, nobody has any doubt as to his meaning.

**KOEHNEN'S**  
**Package Bees and Queens**  
 For Quality and Service  
**KOEHNEN'S APIARIES**  
 GLENN, CALIFORNIA

## THREE-PLY FOUNDATION

Non-sagging  
 Non-stretching  
 Withstands Hot  
 Weather  
 More worker cells  
 Less drone cells

For efficient, profitable  
 combs use **THREE-PLY**

Order now.

Write for new price list.

• • •

**The A. I. Root Company**  
 OF IOWA  
 COUNCIL BLUFFS, IOWA

**Italian Package Bees  
 and Queens**

**F. E. MORRISON**

Rt. 2, Box 103 Auburn, California

**Honey Extractors and  
 Extracting Equipment**

**The Neises Company**

P. O. Box 249 Marshfield, Wis.

### 3-BANDED ITALIAN BEES

2-lb. with queen, \$4.00; 3-lb. with  
 queen \$5.00; Queens \$1.25.

**L. C. BORDELON**

BREAUX BRIDGE, LA.

### Langes Quality Italian Queens

1949 PRICES

1-50, \$1.30; 50 and up, \$1.20—Queens reared  
 under ideal conditions and sold under guar-  
 antee of satisfaction and safe arrival. 10%  
 deposit books your order and reserves ship-  
 ping dates. We ship Leather colored  
 Italians only.

**LANGE APIARIES**

Rt. 2, Box 23-W Mission, Texas



Entomologist Shih-Chun Ma, of Shanghai, (left) arrives at the Utah State Agricultural College, to join with Frank E. Todd, Dr. G. F. Knowlton, and W. P. Nye (left to right) in research in beekeeping, especially in agricultural poisons.



Shih-Chun Ma with Dr. G. F. Knowlton.

## Shih-Chun Ma Joins the Research Group In Utah

Shih-Chun Ma, Chinese entomologist, joins the research group investigating bee poisoning in Utah with headquarters at Utah State Agricultural College. In China, Mr. Ma graduated from the National Peiping University in 1937. Since then he has devoted his time to professional entomology in China. Included in his studies were two years investigating bee problems, especially the pollen and nectar plants of the North China area. During this time he managed the 60 colonies of honeybees used in this study. His "Pollen and Nectar Plants of North China" was published by the Agricultural College of the University of Peiping. In addition Ma worked with problems of insect pests of tea, rice, corn, and tobacco in eastern and central China.

Ma is also a graduate of the Utah State Agricultural College and recently was appointed by the Board of Trustees as a graduate research assistant. His work will be with Dr. G. F. Knowlton, of the Experiment Station in co-operation with F. E. Todd, Dr. G. E. Bohart and W. P. Nye, U. S. Department of Agriculture Apiculturists located at the regional legume seed research laboratory at the State Agricultural College.

## Australia Distribution Center in England

The Producers' Co-operative Distributing Society of Australia now has a three-story building (24,000 sq. feet) in England for the distribution of their honey in the British Isles.

## Travelers' Insurance Uses Busy Bee

A 19x30 inch colored poster shows a straw skep with the bees busily flying about the entrance. It has the caption "The Bee that Gets the Honey Doesn't Hang around the Hive." It is put out by the Travelers' Insurance Co., of Hartford, Conn. Quite a nice job and a good advertisement for the honeybee, if not for modern beekeeping.

## Arkansas Honey Drops

The Arkansas' honey production dropped about 1,000,000 pounds this year. This drastic reduction was attributed to one of the wettest seasons in Arkansas history. Torrential rainfall through June, July and August washed pollen and nectar from blossoms. Wildflowers were abundant but were worthless to bees because of the continual rainfall. The greater part of the 1,250,000 pounds that is being marketed was gathered from the profusion of flowers in late August and September after rainfall had diminished.

But the reduction in honey production is not the only phase that has hurt Arkansas beekeepers this year. The wholesale price of honey has dropped to 10 cents a pound. Successful beekeepers have estimated that they must have 17½ cents a pound in order to realize profit from beekeeping. Ralph Underhill, Ark.

### BE WEATHERWISE

Follow the daily rainfall with a tumbler type rain gauge. Accurate and freeze proof—complete with bracket for mounting on fence post or pole. Price, postpaid \$1.00.

**DADANT & SONS, Inc.**  
HAMILTON, ILLINOIS

## COMB HONEY WANTED

in the frame—TRUCK LOAD—Prefer Texas ORANGE, Huajillo or Clover. Write for particulars.

**A. W. BULAY**

Dayton, Texas

### CAUCASIAN

Package Bees & Queens

**D. T. WINSLETT**

1015 Sonoma Ave., No. Sacramento, California

## BEES AND QUEENS

*Italian, Caucasian and Resistant*

Over 30 years a shipper.

Send for FREE CIRCULARS

## Blue Bonnet Apiaries

Rt. 1, Box 23

WESLACO, TEXAS

## Electric Uncapping Knife



This knife heats in 15 seconds and operates with a steady heat regulated by an adjustable thermostat in the handle. No control boxes. New design in plastic handle.

110-115 V. AC only.

Cotton Cord \$13.50 while they last.  
6-ft. rubber cord \$15.00.

### MACY ELECTRIC KNIFE COMPANY

1239 S. LORENA ST.

LOS ANGELES 23, CALIFORNIA

## Look what a bargain, 3-Banded Italian Pkg. Bees & Queens

AT SUCH A LOW COST. Why not book your order now. Full weight. A health certificate and live arrival guaranteed. Prices through May 10th.

2-lb. pkg. with queen	\$3.50
3-lb. pkg. with queen	4.60
4-lb. pkg. with queen	5.80
Queens, 1 to 100	1.00
Queens 100 up	.90

**FARRIS HOMAN, Shannon, Miss.**

20% discount on all orders booked for shipment after May 10th.

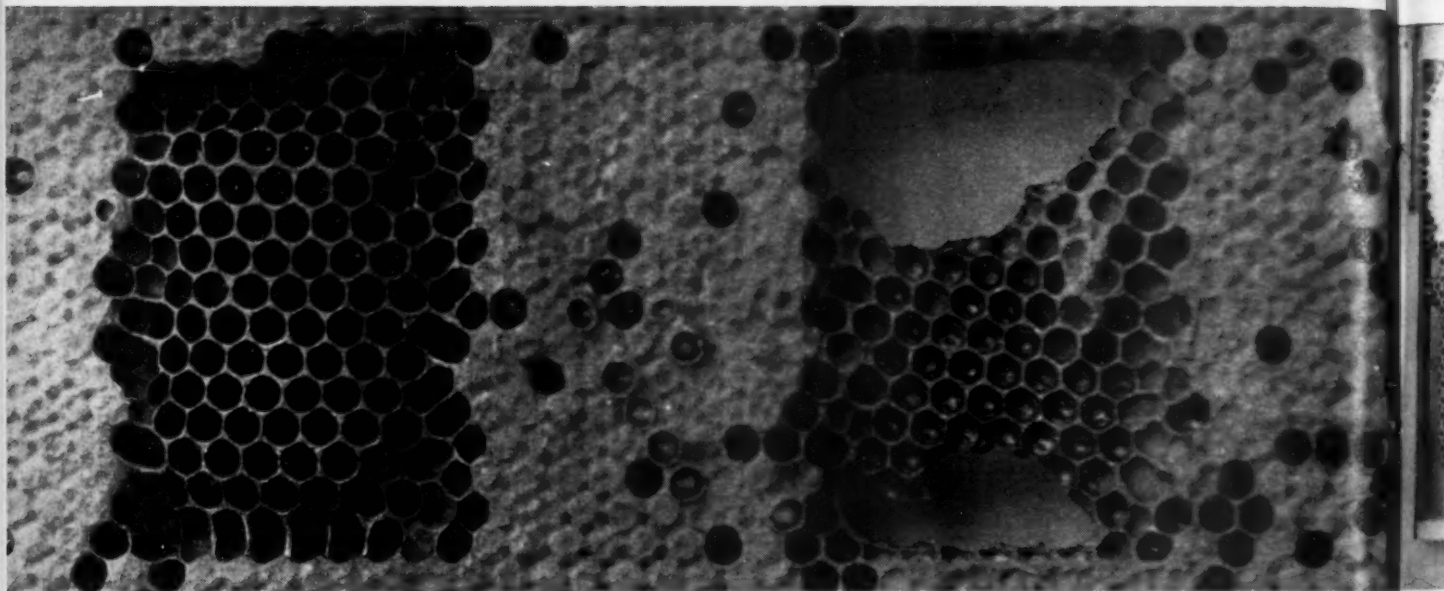
### Three-Banded Italian Queens of Highest Quality

PACKAGE BEES AND 5-FRAME NUCLEI READY MARCH 1ST.  
PRICE LIST ON REQUEST.

**E. R. RALEY**

Box 1610, Daytona Beach, Florida





Two inserts in the same comb. The one at the left was clean, the one at the right diseased. The clean insert has been fastened in; the diseased one partially torn out.

"Somebody said that it couldn't be done,  
But he, with a chuckle, replied  
That maybe it couldn't, but he would be one  
Who wouldn't say so till he tried;  
So he buckled right in, with a trace of a grin  
On his face. If he worried, he hid it.  
He started to sing, as he tackled the thing  
That couldn't be done—and he did it."

I often think of these lines when I remember what I have read and what I have been told of our breeding project—for the history of this project goes back a good many years beyond my association with it. I would hesitate to say who was responsible for the beginning of it. Surely the old saying that "nothing is new under the sun" is very applicable to bee breeding. The name of the man who first thought of breeding bees for production, for resistance, for temper, or for any characteristic is long since buried in the forgotten past.

Certain it is that many men with ideas on bee breeding were rebuffed and forgotten before our own project got under way. I can with certainty, though, go back to the year 1915 when Frank C. Pellett, while traveling in Colorado, was asked by Herman Rauchfuss to inspect a certain colony for American foulbrood. A thorough examination of the colony failed to reveal any disease, although Mr. Rauchfuss assured him the colony had had the disease and had not been treated in any way.

All through the years from 1920 to 1930 there were repeated reports of colonies which survived in apiaries which were otherwise totally

\* From a poem by Edgar A. Guest in his book "The Path to Home." Copyright 1919, by the Reilly & Lee Co.

by

G. H. Cale, Jr.

destroyed by the ravages of American foulbrood. During these years it was the practice in the Dadant apiaries to take all colonies which were diseased to one yard, known as the pest yard. It had been noticed that occasionally a colony which had shown the disease would clean up and remain evidently free of infection.

(A system of marking and watching individual cells of American foulbrood was carried out. During these investigations it was found that bees cleaned some of these diseased cells out—eggs were laid in them—and healthy brood sometimes emerged from them. One colony that seemed resistant or healthy among many badly diseased ones was given a full comb of American foulbrood. The colony completely cleaned up this disease and two weeks later the frame was full of healthy brood, mostly sealed. No disease appeared in this colony either then or during subsequent examinations. The results of these experiments provided the spark that start-

ed Dadant & Sons—and later other cooperators—definitely on the disease resistant research).

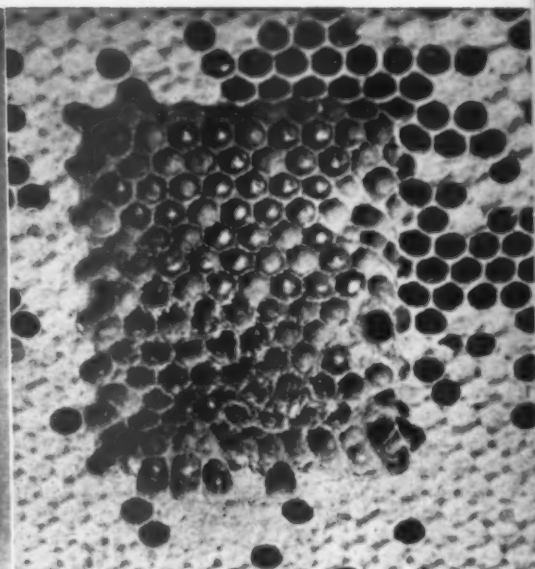
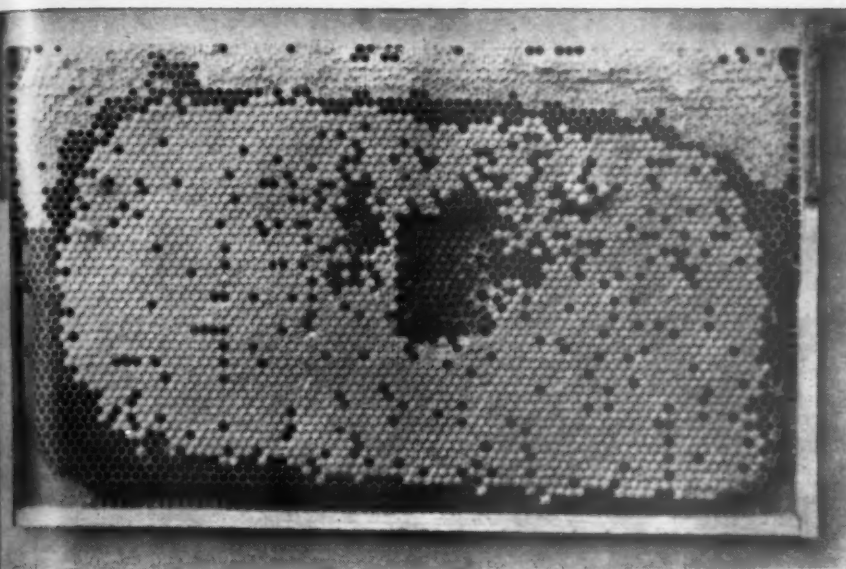
Henry Dadant and G. H. Cale were particularly interested in this experiment of theirs, and in the late 1920's Cale went to Dr. Watson's place in Alfred, New York, to learn his method of artificial insemination. Because of refinements in this technique, which were to come at a later date, these two men were unable to use instrumental insemination in maintaining stock. By the year 1932 however, they had succeeded in gathering in one yard colonies from widely separated sources that had survived wholesale infection of disease in their locale.

In the spring of 1935 colonies which were headed by bees thought to be resistant to American foulbrood were brought to Atlantic, Iowa, to the American Bee Journal Honey Plant Test Garden at the farm home of Mr. Pellett. These colonies came from many different sections of the country—from California to New England. There were

## The History of a

### Part I—Early Years





Above, left, a disease insert in a comb; at right, close up of same insert. Note how the sides of the cells have been torn down by the bees in the attempt to remove the scales of American foulbrood.

## of a Breeding Project

45 colonies in all that went into this first year of breeding work under a new cooperative arrangement, sponsored by Dadant & Sons, the Entomology Section of the Agricultural Experiment Station, and the Agricultural Extension Service of Iowa State College. Under this arrangement Dadant and Cale were to continue to play an important role—since they were to test the progeny of these first queens under commercial apiary conditions.

Frank C. Pellett, representing the American Bee Journal and Dadant & Sons, and Dr. O. W. Park, representing Iowa State College, were to

do the important work of testing stock for resistance and selecting and perpetuating the stock.

The goal of this cooperative arrangement was the development and propagation of a strain of bees resistant to the disease known as American foulbrood. Surely these men and their respective agencies deserve full credit for having the courage of their convictions—for tackling a problem that others had shied away from—for trying to do the thing that “couldn’t be done.”

When we look back on the record of that first year of breeding work under the cooperative arrangement

we find much that might have discouraged investigators more timid than they were. The procedure used in testing colonies was the disease insert method. A rectangle of comb—approximately  $2 \times 2\frac{1}{2}$  inches is removed from the center of the brood nest and replaced by a rectangle which is similar in size. This insert is cut from a comb containing many cells of American foulbrood scales. That first year a total of 31 colonies were inoculated in this manner. These early records show that of this total number of colonies, six were check colonies and that all six check colonies came down with the disease and failed to clean up. Of the 25 supposed resistant colonies tested only seven were found to be apparently free of disease in the final examination during the fall of the year.

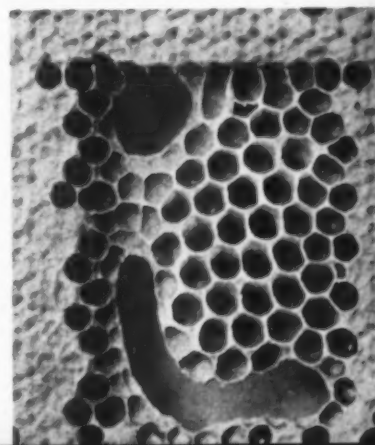
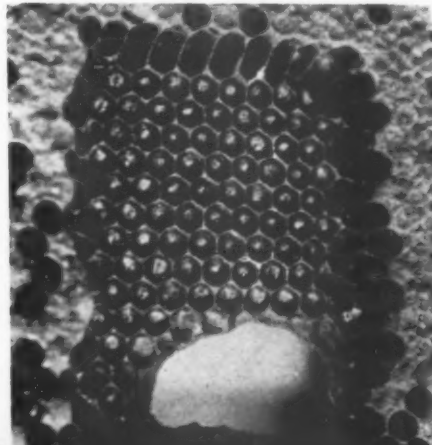
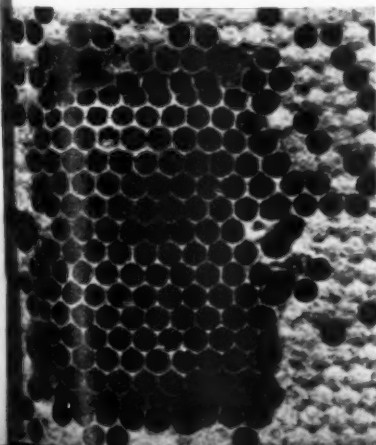
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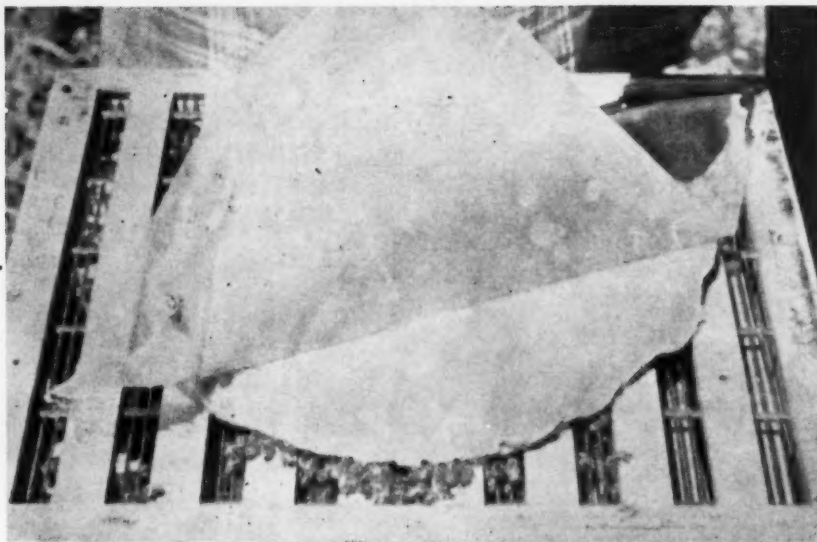
### Three ways in which bees react to disease inserts.

Here the disease insert has been fastened to the rest of the comb and the cell walls cleaned and polished.

In this case most of the insert has been fastened in and the cell walls torn down to the midrib.

Here the disease insert has been completely removed and the bees are building new comb in the area.





Wynne Rackstrat, St. Paul, Minnesota, in this picture, shows how bees feed on pollen supplement candy, made of soy flour, animal yeast, and syrup. Winter candy may be fed in the same way.

## How to Make Soft Candy For Winter Use

by H. H. Luke

**I**N making this candy, I use an ordinary enamel saucepan, or preserving pan, and into this I put 15 lbs. of cane sugar and three quarts of water (hot for preference). Place over a clear, strong fire and stir until the sugar is quite dissolved. When it begins to boil draw the pan aside for a moment, and while it continues to boil slowly remove scum and other impurities from the surface of the sugar. This done, return the pan to the fire, and let it boil as fast as possible, without stirring, for about twenty minutes. Then, to ascertain if boiled enough, have a bowl of cold water ready at hand, and dip the forefinger of one hand first in the cold water, next in the boiling sugar, then again in cold water, and with the sugar adhering to the forefinger try to make a soft ball from it, like a piece of mastic ready for use. These last operations should only occupy two or three seconds. The forefinger must be kept curved whilst dipping it into the boiling sugar, and though a little skill and courage are required to do it for the first time, it is not difficult and does not burn the finger at all.

A sugar-boiling thermometer would be a convenient substitute. If unable to make a ball in the way mentioned, the sugar must be boiled a little longer, otherwise the boiling is finished. Next pour in 5 lbs. of honey ready at hand (about 5 oz. per lb. of sugar). The mixture must be then boiled again for one or two minutes, but great care must be taken not to let it overflow, as honey is apt to rise quickly like milk. I find that adding a small piece of butter of the size of a hazelnut often causes it to settle down, but not always. After the second boiling remove the pan from the fire.

In cooling the mixture pour it into a square tin, 21 by 15 inches. In one of this size 20 lbs. of candy will cool sufficiently in an hour, or in far less time if the vessel is placed in cold water. During the cooling process do not stir while hot. Note this well, for without this precaution the candy will not be smooth but rough in grain. When the sugar has so cooled down that the finger may be kept in it for half a minute without scalding, then begin to stir, and continue to do so until the candy becomes white and

stiff. It is now finished, but in order to transfer it into suitable moulds it must be warmed again; therefore, the whole is put into another pan or vessel which fits on to a boiler containing hot water. In a short time the candy becomes more or less liquid, like cream, and an occasional stir must be given to dissolve all lumps. When properly dissolved and brought to almost a boiling point (say 204° F.) pour it into moulds or boxes and allow it to cool.

Candy thus made if stored in a dry, cool room, will keep soft for years. If the sugar has been accidentally overboiled (in which case it is brittle and breaks when tested) add a little water and boil again to the proper point. As a preventative of over-boiling, remove the pan from the fire while testing whether cooked enough. Also to prevent mishap in another direction, the saucepan used for making the candy should not be more than half full.

It must also be noted that the honey is to be boiled thoroughly, not merely mixed with the sugar. I have toiled not a little in the endeavor to make a bee-candy which



President Roy A. Grout, at left, and Vice-President Charles Hoffmann.  
(Photo by courtesy of Gleanings in Bee Culture)

## Officers of the American Beekeeping Federation For 1949

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Vice-President—Chas. S. Hofmann  
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Illinois—G. H. Cale.  
Iowa—Newman I. Lyle.  
Kansas—Dr. R. L. Parker.  
Louisiana—E. C. Bessonet.  
Michigan—Oscar Schmidt.  
Minnesota—C. G. Langley.  
Mississippi—Wm. Wicht.  
Missouri—George C. Nagel.  
Montana—Irvin Ravvin.  
Nebraska—E. H. Adee.  
North Carolina—W. A. Stephen.

Ohio—Emerson Long.  
Pennsylvania—John Hess.  
Tennessee—J. M. Amos.  
Texas—Charles Hansen.  
Washington—T. Rownes.  
Wisconsin—Joe Mills.  
At Large—C. J. Hudson, Woodrow  
Miller, Carl Killion, Alan Root,  
Hans Schumacher, Burel Lane.

Biloxi was chosen as the place for  
the next annual meeting and con-  
vention, with the third week in  
January as a tentative time.

as nearly as possible contains all the  
advantages of the natural food. My  
own stocks have been fed entirely on  
this candy during the whole winter,  
and I have not lost a single colony  
during all the time I have been in  
charge of the Abbey apiary here. It  
is also good for feeding queens and

their attendant bees in mailing cages,  
as I have tested it scores of times for  
this purpose without a single com-  
plaint.


(Bro. Columban, O. S. B., St. Marys  
Abbey, Buckfast, S. Devon. In The  
British Bee Journal, September 14,  
1905).

### Speaking of Signs

Speaking of signs, the Salt Lake  
Honey Company trucks have slogans  
reading: "Drive carefully—Your  
Honey's Inside."

Glen Perrins—Utah.





# The Aguinaldos,

Major  
Bee Plants  
of Cuba

by

Gonzalo S. Ordetx

**B**Y the name "aguinaldo" are designed in Cuba some of the most important honey bearing plants of this island. The name "campanilla" is also employed because their blossoms are bell shaped (campanilla is the Spanish term for "little bell"). There are several species visited by bees whose flowers are yellow, blue, pink, red, purple, white or of mixed shade and color; but the most useful to the beekeepers are the purple, pink, and white varieties especially the last two.

The aguinaldos are plants erect or scandent, belonging to the genus *Ipomoea* of the morning-glory family (Convolvulaceae). The best known representative of this genus is the "sweet potato" (*Ipomoea batatas*), which is extensively cultivated in tropical America; it is a minor source of honey.

**White Aguinaldo or Aguinaldo Blanco** (*Ipomoea sidaefolia*). This is the main honey plant of Cuba. Some beekeepers believe that more than one-third of the honey harvested in the Island comes from this source, an opinion that does not seem to us to be exaggerated, if we take in account the pitiless destruction to which a great part of our woodlands have been subjected, this plant is almost the only productive source of honey in many regions.

The white aguinaldo is a vigorous perennial vine which grows in all

Top picture is of pink aguinaldo (*Ipomoea triloba*), found growing in large acreages. The large picture is of white aguinaldo (*Ipomoea sidaefolia*, Choisy).  
Photo by Sotolongo.



kinds of soils, preferably in the red and alkaline, covering the pastures and uncultivated lands, climbing over fences, thickets and even over large sized trees. It begins to bloom in the second fortnight of November and remains loaded with blossoms until about the middle of February; but its period of bloom arrives at the maximum during the Christmas season, in which the fields appear covered with a white mantle of campanillas, producing a delightful sight to the traveler who believes himself to be contemplating a field partially covered with snow. Owing to the time in which it blooms it is mostly known as "aguinaldo de Pascua" (Christmas aguinaldo) or merely as the "aguinaldo." The Spanish word aguinaldo means gift, New Year's gift or Christmas present.

One of the characteristics of this plant is its irregular blossoming which has an alternative character; one day we see a field covered with blossoms and the following day there is hardly an open campanilla to be observed, afterwards it will bloom for several consecutive days. It presents its irregularity with more frequency toward the end of the season.

The blossoms open at dawn and as soon as the sun begins to shine there is perceived, even at a distance from the apiary, the joyful hum of the workers that go out and return loaded with delicious nectar. The flow is so considerable in the early morning that the bees are seldom seen working on flowers other than those of the aguinaldo. After about nine o'clock in the morning, the secretion of nectar seems to diminish considerably, but the bees continue to suck up on the campanillas until noon when the ardent rays of the sun cause the blossoms to close. On cloudy days the campanillas remain open until the afternoon, for which reason one would expect a large haul for the bees. This is not the case, however, because on cold or rainy days the flow of nectar is found to be very sparing; therefore the warm, bright, sunny days with little wind are the best, even if the flowering period is only a few hours.

The quantity of nectar which the aguinaldo produces in a short time is so great that very few plants in the world can be compared to it as a honey bearer. In the United States, the alfalfa and the clovers are considered the most valuable species to the beekeeper, they alone producing not far from seventy per cent of the honey that goes to the wholesale market, but these are cultivated

plants and hundreds of acres are sown in a single locality, enabling the beekeeper to obtain a considerable harvest. On the other hand, the aguinaldo in Cuba is a wild plant which every year is torn up and burned in piles, even in places where it does no damage, as fences and roadways. Notwithstanding the merciless warfare which is waged upon it, it never fails to bring the gift of its flowers to the Cuban beekeeper during Christmas. Strong colonies store as high as 200 pounds of surplus from aguinaldo in a favorable season.

In Mexico, aguinaldo occurs along the *tierra caliente* (lowlands) from Sinaloa to Tamaulipas, Yucatan, and Oaxaca. In reply to a special request A. Castillo Calero, prominent beekeeper of Merida, Yucatan, writes as follows: "Xtabentun (Maya name for the aguinaldo) is an unreliable yielder, not blooming at all in some seasons and in others the bloom secreting nectar sparingly. As a honey plant in Yucatan, it comes next to the 'dzidzilche' (*Gymnopodium anti-gonoides*) and the 'tah' (*Viguiera helianthoides*) that are the major sources of surplus." . . . However, we understand that this plant might be very important in other areas of Mexico, especially in those with a humid climate and mild-winters, as Oaxaca, Tabasco, and Veracruz.

In southern Florida aguinaldo is often planted as an ornamental and also it is found growing wild in waste lands. At Miami the writer met several beekeepers who reported that in mild winters some honey is secured from this source. According to H. B. Parks this plant occurs along the Gulf Coast of Texas and extends inland along the river bottoms, although nowhere in abundance. There are no reports of aguinaldo honey from this region.

The honey from this plant is water white or nearly white, and of such delicious taste that it is regarded as one of the finest honeys of the world. Albert G. Hann, Caucasian queen breeder, who visited Havana last winter stated: "I have tried different kinds of honey through the States but none can be compared with this superb aguinaldo honey." It is reputed to have medicinal value and is recommended, even by physicians, as a supplement to the diet of persons having stomach trouble, asthma, coughs, colds, and some other ailments. Nevertheless, it seems to us that its therapeutic value has been greatly overestimated, and its effect is mostly psychological.

The wax produced from this honey is pearly white presenting the combs a beautiful appearance when well finished.

**Pink Aguinaldo or Aguinaldo Rosado.** (*Ipomoea triloba*). This aguinaldo is widely distributed in tropical America. In Cuba it is found throughout the whole Island, although it is not as common as the white except in some localities of the province of Pinar del Rio where it seems to be most abundant. In Central America it is very common, especially in Costa Rica in thickets of the Meseta Central, extending to the Pacific coast. It is also known in Cuba by the name "campanilla". rosada" (*rosada* is the Spanish word for pink). In Costa Rica it is called "churrizate"; in Panama and Salvador plainly "campanilla."

The flower of the pink aguinaldo is of the same size as the white variety, having a pink-violet shade; it appears in the second half of October, and the plant remains in full bloom until the end of December.

It is possible that this pink aguinaldo secretes as much nectar as the white although not apparently so. This is due to the fact that its maximum bloom takes place when the hives have not acquired sufficient strength to store all the honey produced. Notwithstanding, the yield is good, averaging 60 pounds of honey per colony, with as high as 150 pounds with strong colonies in an exceptional season.

The honey of the pink aguinaldo is nearly white in color and of as good quality as that of the white. It is, however, often mixed with royal palm honey gathered early in the season.

**Purple Aguinaldo or Aguinaldo Morado** (*Ipomoea crassicaulis*). The purple aguinaldo is the less valuable of the group, at least in Cuba. It is an erect shrub from one to two meters high. It has a wide distribution in tropical America, and it is found in the mainland from the lower Rio Grande Valley, Texas, southward to Brazil and Peru.

This species produces a large violet-purple flower that appears during almost all of the winter and in spring; occasionally it yields nectar very copiously. It seems to have external nectaries in the lower part of the exterior surface of the calix, since honeybees are seen, before the flower opens, avidly sipping the bud. The honey is said to be light amber in color and of mild flavor.

— Cuba.

# Industry Again Seeks Price Stabilization

**I**NDUSTRY representatives in Washington last September were unanimous in recommending to the Production and Marketing Administration, USDA, that the honey industry be granted some form of price support which would assure the honey producer 12c for honey in bulk containers. It was the opinion of that group that the program be in the form of a loan program. The American Bee Journal supported the recommendation of the honey industry for price support as the only immediate solution to the present price situation.

At the St. Louis meeting of the Federation, Mr. E. C. Bessonnet, a member of the Executive Committee of the American Bee breeders' Association, and his son, Calvin Bessonnet, president of the Louisiana State Beekeepers' Association, presented a bill which they were instrumental in having drawn up by the Hon. James H. Morrison, Congressman from the Sixth District of Louisiana. This bill is reproduced here and asks for price support on the basis of 90 per cent of parity.

The Morrison bill was first presented to the Resolutions Committee of the Federation. It was not the desire or the intention of this group to modify the bill as presented. It was contended that those representing the industry in Washington should be able to approach the problem of price stabilization with as many avenues of approach open to them as possible. Certainly the Morrison bill was one avenue of approach and should be given full consideration, but others might develop. It was for these and similar reasons that the Resolutions Committee presented a broad resolution instructing the Federation to seek price stabilization for the beekeeping industry.

Although the resolution, as presented by the Resolutions Committee, was passed by the delegate body, Mrs. Laura Shephard, Calxico, Cal., asked that the Morrison bill be read

in its original form, and then submitted a resolution supporting the Morrison bill. This resolution also was passed by the delegate body of the Federation. It was obvious that even those morally opposed to price support by the Government felt that a program of this type was necessary in view of our present controlled economy.

Recently, the American Bee Breeders' Association, in a letter signed by its president, Mr. N. C. Jensen, and Mr. E. C. Bessonnet, is soliciting the support of the entire beekeeping industry for the Morrison bill asking for price support at 90 per cent of parity.

There are those who feel that a School Lunch Program, particularly if obtained on a basis which would guarantee the producer 12 cents in bulk containers, should be obtained first. Some feel that a School Lunch Program on such a basis might be sufficient to stabilize our honey markets. Certainly the educational value of School Lunch Programs is worthy of earnest consideration. Others feel that both price support and a School Lunch Program should be obtained, if at all possible. Some

have stated that, while the Morrison bill was a fine thing, honey might be grouped with other commodities in a bill which would receive greater support. It also has been said that it is entirely possible to get honey declared a "Steagall" commodity and as such would be given price support by the Secretary of Agriculture.

The important thing is that we need to stabilize the price of honey—now and in the future. Stabilization is essential to insure a profit to the honey producer and his continuance in the beekeeping business. Something must be done to prevent drastic reduction in the number of colonies which are needed in the pollination of more than 50 of our food crops. In some way, our industry must be given increased consideration due to its valuable pollination services to agriculture.

This is not going to be an easy task. It will require an over-all industry attempt accompanied by the entire support of the bee and honey industry. It will take time and effort and Washington contacts. Your support is needed. A letter to your Senator and Congressman will be most helpful.

## Morrison Bill Would Support Honey Price

The Honorable James H. Morrison, Congressman 6th District of Louisiana has prepared the following bill to be introduced during the next session of Congress. We suggest that all beekeepers who are interested write their Congressman and Senators to support the Morrison bill.

### TO PROVIDE PRICE SUPPORT FOR HONEY

That the Secretary of Agriculture is hereby authorized and directed, by loans, purchases, or other operations carried out through any instrumentality or agency within the Department of Agriculture or under the direction of the Secretary of Agriculture, to support the price received by the producers of honey at not less than 90 per centum of the parity price.

Sec. 2 Notwithstanding section 303 of the Agricultural Act of 1948 which provides when titles II and III of such Act shall take effect, sub-paragraphs (A), (B), (C), (D), and (F) of section 301 (a) (1) of the Agricultural Adjustment Act of 1938, as amended by section 201 (a) of the Agricultural Act of 1948, shall be applicable, upon the enactment of this Act, to any determination of parity price made pursuant to the first section of this Act.

CONGRESS OF THE UNITED STATES  
House of Representatives  
Hon. James H. Morrison, 6th District  
Louisiana

E. C. Bessonnet, Executive Committee, A.B.B.A.  
Calvin Bessonnet, President, Louisiana Beekeepers Assn.

# Things a Beekeeper Can Do in Winter

by

Cameron Paine

**A**S I write this article, the mercury outside is not far above the zero mark and the wind is blowing at nearly gale velocity. The house is on top of a high hill and the west winds sweep unbroken straight from the southern end of the Green Mountains in Vermont. Our home was built by my grandparents more than 135 years ago and the family has always occupied the farm. I suspect some of the timbers used in building the house were hewn from trees cut when the land was cleared. The manner in which these old New England houses have weathered the storms down through the ages, including the hurricane in the fall of 1938, is indeed a tribute to enduring craftsmanship of these early builders.

If the snow accumulates to great depths and if the winds whip it into deep drifts, as it sometimes does, making the roads temporarily unpassable, we shall continue to be warm and comfortable. Our shed is filled with dry hard wood cut and stored last year and in the cellar is a good variety of vegetables, apples, and many jars of canned fruits, jams, and jellies. There are barrels of home-grown meat and in addition, we have a supply of venison that I secured during the hunting season. What a feeling of security it gives one to see these items of food stored in the cellar when the winter season sets in. There is enough for our family and some for any of our neighbors who may need help.

As I look back over the years, I can think of many changes all of which have contributed to making living in New England more attractive. With improved roads, rural electrification, telephone, and radio there is scarcely a time when we are not in contact with our neighbors and the world at large. Yes, I feel that one who has not had a taste of New England farm life in winter has missed some good living.

Sometimes I have been awakened at night by the beating of the storm on my windows and the roaring of the wild winds outside, and, as I lay there I would think of my bees and wonder how they were surviving the winter. If, in the early fall, I did not neglect to properly prepare them for the cold months ahead I have had little fear for their welfare, even though the hives might be completely buried by the snow.

Let us consider briefly some of the things that a beekeeper can do during the late fall and winter months, when the bees are not active. To the casual observer it would seem that there is little to do, but to the more experienced there is much that can be done now in preparation for the honey crop we hope to harvest next season. The beekeeper who puts off getting his equipment and putting it in condition to use is making a serious mistake. Frequently a good crop of honey is lost because supers and other supplies were not ready when the bees needed them. A warm room in which to work will contribute much to the comfort and efficiency of the operator.

First: take an inventory of the supplies that are on hand and put the different items in separate piles. By so arranging them you do not have to hunt for an article when the rush season comes. Look the equipment over carefully. You will likely find pieces needing renailing or repairing. Apply a coat of good paint to bottom boards, the outsides of hive bodies, supers and outer covers. This will prolong their life and save their owner real money. New equipment is expensive and has been hard to obtain. If you expect to need more supplies then you have on hand by all means order them at once.

At this time plan to look over all the combs that are on hand. Any that have become damaged, or combs containing an excess amount of drone cells, are laid aside to be rendered

into wax and made into comb foundation for next season's use. Beeswax is valuable. As we work our bees, we aim to save every particle of broken comb and scrapings from the frames. During the winter we pack this material and the honey cappings into bags and send them away to be rendered into wax. The people who do this work make the wax into the grade and type of comb foundation desired.

If you are using plain or unwired foundation you will have frames to wire. No preparation will be more appreciated next spring than having this wiring job done. Comb foundation is very fragile when cold and putting it in frames at this time is not recommended.

Finally, the long winter evenings provide opportunity to catch up on one's reading. During the rush of the busy season I do not have time to read carefully all the articles appearing in all my journals. After the day's work is finished I like to draw up beside the warm fire and look over my journals and magazines. As I read and reread them, I'm sure to find some articles especially helpful that were overlooked the first time. Now and then I try to add a new book to my small library on bee culture and I enjoy a wonderful companionship in my reading.

New Hampshire.

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## Pellett Makes "Economic Botany"

The April-June (1948) number of "Economic Botany" has twenty page article by Frank C. Pellett on "Plants Useful for Bee Pasture." The article is well illustrated and gives good pictures of the various honey plants as well as the value of bees as our agricultural pollinators.





For the cover Florence Tomlinson has a charcoal drawing of Mrs. Phillips which is excellent. The drawing is from photographs (without wrinkles at the Doctor's express commands).

by G. H. Cale

**I**N her book, "Honey Bees and Fairy Dust" (McCrae-Smith Company, Philadelphia), Mary Geisler Phillips has given to children an introduction to beekeeping which has never been surpassed. As she

"Sings a song of workers,  
A pocket full of wax,  
Eight pretty wax-scales  
In their little sacks.  
When the wax is molded,  
The cells begin to show,  
Isn't that a pretty comb  
Where baby bees can grow?"

Betsy and Jimmy, the little friends who learn about bees from kindly,

Professor Lyman P. Wilson (top), master of ceremonies, presides at a dinner for Dr. Phillips (left) and Mrs. Phillips. At left, Mrs. Phillips with her "four" boys. Dr. Phillips (seated); top row, left to right, Frank Junior, William and Howard.



Mary Geisler Phillips at her desk as editor of the College of Home Economics at Cornell University.

# Mary Geisler Phillips

Who Sang a Song of Workers  
With Pockets Full of Wax

old Dr. Miller (our own Dr. Miller), are accompanied in their search for knowledge by a little "Fairy" to hold their childish interest.

Mrs. Phillips, wife of Dr. E. F. Phillips, Professor Emeritus of Apiculture, New York State College of Agriculture at Cornell University, is a very versatile lady. In addition to "Honey Bees and Fairy Dust," she has to her credit "Ant Hills and Soap Bubbles," "Spider Webs and Sunflowers," "Nature by Seaside and Wayside" (in four volumes), "Things that Go," "Anything Can Happen," and "Glimpses into the World of Science"—all books for children.

A list of Mrs. Phillips's accomplishments will perhaps make many mothers of three or more children somewhat envious. She was graduated from the University of Pennsylvania with a Bachelor of Science

degree in biology and she taught biology and chemistry at the Philadelphia High School for Girls. She was assistant editor of Botanical Abstracts, of Biological Abstracts, and Child Craft, radio script writer for the A&P Hour, and for the New York State College of Home Economics.

Since 1931, Mrs. Phillips has been associated with the New York State College of Home Economics at Cornell University, first as editorial assistant, then as assistant editor and and as editor since 1944. In 1945 she was made associate professor and editor, in charge of the Office of Public Information. She is also the author of stories and feature articles in magazines for both adults and children.

With all that she found time to be the mother of three sturdy boys, E. F. Phillips, Jr., Wm. T. Phillips, and

Howard G. Phillips, and is now the grandmother of three boys and one girl.

It's a busy life!

My own acquaintance with Mrs. Phillips goes back to the age of 27, when as assistant to Dr. Phillips in the Office of Bee Culture, Bureau of Entomology in Washington, I became intimately acquainted with Dr. Phillips and his entire family. Mary Phillips became a second mother to an aspiring young man.

And, too, the aspiring young man became a baby sitter occasionally for the three obstreperous youngsters who early showed their characteristic genius inherited from a brilliant father and mother by figuratively tearing down the house. It would not be surprising if all three remember the threatened spankings that an irritated baby sitter promised to their rear ends just before sending them stormily to bed; only to relent when father and mother came home, to say that they had been "very well-behaved children, indeed."

And then when this aspiring young man became ill or faced a family problem it was either Frank or Mary who came to his rescue. In sickness it was the comfort and the help of a father and mother with good food and kind attention; things that will never be forgotten.

As the wife of an outstanding leader in the beekeeping industry, Mrs. Phillips has played an unseen part in helping to shape the leadership which her husband exerted in his great years of service, not only in the Department of Agriculture as head of the Office of Bee Culture, but since as Professor of Apiculture at Cornell.

A word about the three sons. E. F. Phillips, Jr., is Division Head of Esso Standard Oil Company, New York; Wm. T. Phillips is Economic Advisor to the Department of State, Washington; Howard G. Phillips is Production Manager and Personnel Director of the Washington Institute of Technology, College Park, Maryland.

In her book it says that

"Little Miss Charm has lost her swarm

And can't tell where to find it!  
Leave it alone, "t will never come home,

Because she didn't mind it."

Mary Geisler Phillips will never have to say that. Her "swarm" has proved to be an outstanding achievement, a family whose accomplishments will reach far into society, a life which should be a source of satisfaction.



# A Biography of Langstroth

## Part II—The Bee Space

by Dr. E. F. Phillips

**W**HETHER or not the courses that Langstroth took at Yale were such as best to fit him for his later career, all that we need to conclude is that he learned to use his head. He got little useful training in the fields of insect behavior and physiology but Langstroth was not a biologist nor an entomologist. His life was singularly devoted to the ministry and to the study of the honeybee.

Before graduation in 1831, Langstroth came under the influence of Peter Parker, and was his first convert. He determined to dedicate himself to the Christian ministry. Therefore, after graduation he entered Yale Divinity School, planning to support himself meanwhile by teaching. The labor of teaching caused him to discontinue his academic work in Divinity but in 1834 he returned to Yale as a tutor in mathematics where he remained two years.

Early in 1836 an opportunity arose for him to be considered for the pastorate of South Church, Andover, Massachusetts. In January of that year he was selected as pastor. His stay was brief. A malady he always called his head trouble possessed him and he was forced to sever his relations with that church.

Langstroth's head trouble requires discussion. He says, "For many years I have suffered from what I have been wont to call my head trouble. It not only unfits me for mental exertion but also disqualifies me from enjoying almost anything personal to myself. While under its full power the things in which I usually take the greatest pleasure are the very ones

which distress me most. I not only lose all interest in bees but prefer to sit on that side of the house where I can neither see nor hear them. Gladly, if at all convenient, I would have my library of bee books hidden from my sight and often I have been so morbid that even the sight of a big letter B would painfully affect me. I have for years read less and less, and occupied my time mainly with chess, which is too impersonal to suggest the melancholy ideas which so often torment me when reading." When we realize the loss of time and the suffering due to this ailment one must be surprised that Langstroth accomplished so much.

While at Andover he bought two colonies of bees and after trying to learn the details of their care he obtained a copy of a small book published in 1831 by Jerome V. C. Smith. Later he bought a copy of Bevan and also a Huber but remained ignorant of the earlier efforts to devise a workable hive by Morlot and other German and French beekeepers. On moving to Greenfield in 1840, almost his first purchase was a colony of bees in a section of a hollow log.

From Greenfield he moved to Philadelphia and established himself at the corner of Chestnut and Schuylkill Streets. Here he had a second-story veranda and several spare attic rooms and in these he established a city apiary. Later he moved the bees across the Schuylkill River to a location approximately where the University of Pennsylvania is now situated. In 1851 he took first prize in an exhibit of the Philadelphia Horticultural Society for specimens

of comb honey in glass.

Those who now keep bees, often fail to realize the difficulties of the task with hives in which combs cannot be handled. Langstroth tested the Huber leaf hive and the Bevan bar hive but in both propolis or bee glue made it almost impossible for him to handle the bees suitably. Finally in an effort at least to be able to get the covers off his hives so he could get at the bars he placed narrow strips of wood along the top of the hive under the cover hoping that these would enable him to get at the combs with less effort. To his utter amazement the bees did not build comb nor did they deposit propolis in this space. A part of his trouble was solved!

Throughout the season of 1851 Langstroth used hives with this space, now called the bee space, over the bars, meanwhile pondering the problem of devising a plan to get combs out of the hive without cutting them loose from the sides. As he drove his faithful old horse home on October 30, 1851, after spending all day in his apiaries laborously shifting combs in preparing bees for winter, it suddenly flashed upon him that a space equal to that at the tops of the bars could be left at the sides of the comb and the problem would be solved. In short, the need was for frames suspended from rabbets at the top of the hive with a bee space all about them. Small wonder that when later writing about it he says, "Seeing by intuition, as it were, the end from the beginning I could scarcely refrain from shouting out my 'Eureka!' in the open streets."





February, 1949

# American Honey Institute

Already the second month of the year has appeared on the face of the calendar and it has caught some of us rather redfaced. Whatever did happen to those New Year's resolutions, anyway? Did we forget them completely?

The new year always brings new hopes, and good intentions. The American Honey Institute is one of the prime hopes of the honey industry. In its progressive, alert program of honey promotion the honey industry finds a means toward successful sales.

But the program is not self-supporting. It will not stay aloft amidst the high competition of other industries with a simple abracadabra and a switch of a magic carpet; it depends on the pledged support of the industry for which it works. It needs financial props.

Those props are the ones you furnish. Good intentions are not enough. Resolutions are not enough. They must be backed by actual financial support. Those New Year's resolutions concerning the American Honey Institute must not be left on page one of our new 1949 calendar—they must be carried along throughout the entire year in a sincere effort to give lively support to the promotional program of the Institute and consequently to the entire honey industry.

Let's see what can be accomplished with your cooperation: With your help the American Honey Institute will continue its advertisements in professional magazines this year. Nurses, physicians, and teachers read these magazines. They in turn reach the families of the nation. Thousands of requests for the nutritional booklet on honey and for other recipe booklets were received in 1948 because of these ads. In turn, it caused many a pound of honey to be slipped off the grocer's shelf and into the consumer's shopping bag.

You will be pleased to know that the first advertisement of honey that is drawn up for this year has merited the seal of acceptance of the Council on Food and Nutrition of the American Medical Association. This seal is of utmost importance to the beekeeper. It gives his product prestige in the consumer's eyes. It infers that the product advertised is a high quality one. It re-affirms the honey

Commercial State Bank Building,  
Madison 3, Wisconsin

facts that are given in the ad and shows the honey industry as an honest and trustworthy one. It is only with hard and diligent work that the American Honey Institute has been able to obtain this seal for the advertisement. It means a great deal to us and to the American consumer—it should mean a great deal to you!

Of course, the amount of the dues that you send to the American Honey Institute will remain voluntary. But remember—the first printing of this ad this year and all subsequent ads will depend upon your contributions. The ad will be inserted in the magazines as soon as funds are sufficient to allow for this expenditure.

The results of this professional advertising last year were overwhelming. Perhaps those of you who attended the meeting in St. Louis will recall the display rolls showing the requests for literature that came as a direct result of these advertisements. The honey industry demands an alert, active program such as this. Let's see that it is maintained.

**All contributions should be mailed directly to the American Honey Institute, 114 N. Carroll Street, Madison 3, Wisconsin.**

Yes, 1949 brings new ideas, new encouragement. It brings the 81st Congress, a woman senator, television sets, houses warmed by the heat of the earth, the hope of a new and larger honey market. But the old things that have proved their worth should not be overlooked. There's "Oklahoma," the longer skirts, "packaged education."

The American Honey Institute follows this same pattern—it is looking ahead, mapping out new promotional strategy, new plans for the future. But it refuses to abandon its old, time-tested policies that have worked so well in the past. The activity of sending news releases to the newspapers, magazines, and radio stations of the nation, for instance, is far too valuable to the honey industry to allow it to lapse. On the contrary, the Institute has planned to increase its releases to these media, offering them photographs of honey foods, and sending them more ma-

terial each month. These newspapers act as a backboard for the honey publicity that is fed to them; they direct our material right to the American people and reflect our honey promotion over a large, inclusive area.

A recent letter to the Institute carried this message: "Noticed your recipe for 'Honey Fruit Cake' in last week's Purity leaflet. Also in the same issue the suggestion for the use of honey in place of sugar for cranberry relish. We appreciate what you are doing with your advertising and recipes."

This note accompanied a large contribution check from the sender.

This beekeeper will find that his contribution will entitle him to receive another Institute tradition—the annual directory. This directory is published at the beginning of each year and contains the names of all Institute members plus the amount they have contributed. Every member, regardless of how large or small his contribution, receives a directory. What better aid could there be when looking for cooperation from other beekeepers than to know who is cooperating with their national organization? The directory is at the printers now and will soon be in the mailbox of every 1948 member.

Is your name in the directory? Will it be in the one for 1949?

A free land like America demands that its people are clear and intelligent thinkers. It demands more of its populace than does a totalitarian state for it demands individual alertness and initiative. Therefore, it is up to you, completely, whether or not the honey industry can become one of the leading food industries of the country. It is your decision whether or not to support those who would guide you toward this goal. The American Honey Institute, with your financial support, is that guide.

Yes, it is up to you. What is your decision?

## Honey-Nut Rennet Desserts

½ cup pecans  
1 rennet tablet  
1 tablespoon cold water  
3 tablespoons honey  
2 cups milk (not canned)  
Whipped cream (if desired)

Chop pecans quite fine and divide among 4 or 5 individual dessert

glasses. Dissolve rennet tablets by crushing in cold water. Add honey to milk. Warm slowly, **stirring constantly**. Test a drop on inside of wrist frequently. When **COMFORTABLY**

**WARM (110°F.) not hot**, remove at once from heat. Add dissolved rennet tablet and stir quickly for a few seconds only. Pour at once, while still liquid, into individual dessert

glasses over nuts. Do not move until set—about 10 minutes. Then chill in refrigerator. Just before serving, top with whipped cream and garnish with honey comb.



Honey Nut Rennet Desserts

## Pollen Collecting

Reprinted from the *Journal of Animal Ecology*, Vol. 16 p. 122 (British) is an article by A. D. Synge, of the Rothamsted Experiment Station, entitled "Pollen Collection by Honeybees." By the use of traps about 25 per cent of the collected pollen was recovered. Clovers yielded the best in pollen, and when pollen was fed to the bees they showed their preference for white clover pollen. As has already been observed by Todd, Bishop and Eckert, colonies differed widely in pollen collecting.

## Wood Preservative

A "miracle" wood preservative which has been recently perfected will really increase the life of hives. Copper and zinc naphthenates may be painted on or the wood may be dipped into the liquid. After drying, the hive may be painted if desired.  
E. F. Bea, Minnesota.

## Outdoor Emergency Feeding

In the spring when roads are bad and the weather is inclement, certain beekeepers of size in northern Iowa have resorted to the use of outdoor feeding in trenches. A long, shallow trench is dug and lined with building paper or roofing paper and then filled with a thin sugar sirup. The sirup should be made thin enough to keep the bees from fighting over it, usually a sirup made with 2 parts water and 1 part sugar will do the trick. Floats are provided to keep the bees from drowning in the sirup, sawdust or excelsior sometimes being put into the feeders. The trench obviously should be near the apiary and dug where water will not drain into the feeder, and should be covered, if possible, to prevent rain or snow from diluting the feed.



# Crop and Market

## How is Honey Moving?

There are very few reports of honey moving rapidly, most of them being from fair to slow. The movement seems to be best in the north-eastern states, in the east central states, and in the intermountain territory. No doubt, the honey movement in the central states is suffering from the fact that the crop was practically nil, and many beekeepers had not taken the pains to purchase honey elsewhere in order to keep their customers supplied. In fact most of our difficulty now, we believe, is due to the fact that consumers have gotten out of the habit of using honey, through negligence on the part of the usual suppliers during the good honey demand. This means that the consumer will have to be re-educated. The South and Southeast are fortunate in that most of their honey moved through their usual channels during the war years and they have seen the reflection in better demand in the past two or three years than in other sections of the country. Advertising by some of the larger co-ops and larger independent packers, no doubt, has been a stimulus.

## Will All Honey Move?

In the northeastern, east central and southern states it is apparent that all honey will move before the new crop is ready, except, perhaps, some of the lower grade bakers' honey for which the demand is light. The central western states will have no trouble in moving the insignificant crop of 1948, whereas the plains states and the California coast seem

## M. G. Dadant

to have a great deal of doubt as to whether or not the 1948 crop will all move previous to the new crop. This applies particularly to the amber grades. The white grades seem to be in sufficient demand and a short enough supply to warrant that it will clean up pretty well.

## Jobbing Prices

We have a great range of jobbing prices, the amber in various sections of the country running all the way from 6 to 10 cents per pound. One report gives 6 cents for bakers' stock in Georgia, while 10 to 12 cents for amber stock in Arkansas does not seem to be out of the way. However, the average for the amber grades will run about 8 to 9 cents per pound.

There has been an appreciable stiffening in price of the white grades. We have reports from California and Minnesota of white honey at 8 and 8½ cents per pound. However, most quotations apparently range between 10 and 12½ cents per pound. One Colorado reporter previously had gotten 10½ cents for a carload of fine white honey and was able to sell another car in early January at 11¼ cents F.O.B. shipping point. This shows a decided stiffening.

The Canadian provinces of Quebec and Ontario seem to be faring fairly well in maintaining jobbing prices around 16 cents per pound, but all

**HONEY WANTED** — Cars and less than cars  
TOP PRICES

**C. W. AEPPLER CO., OCONOMOWOC, WIS.**

Canadian provinces are doubtful whether the old crop will move previous to the new 1949 crop coming on the market.

## Retail Prices

Here again we have an extreme variation in prices, the 1-pound price varying from 18 to 35 cents in the various Canadian provinces, the lower prices being in the prairie provinces and the higher prices in Quebec and British Columbia. In the United States, prices on 1-pound white vary from 23 to about 35 cents retail, although there are a few quotations as high as 39 to 40 cents where the market has been well handled and maintained.

With the 5-pound pails, we find the intermountain states seem to be suffering the most from price cutting, the prices offered ranging as low as 75 to 95 cents retail. In the Pacific states there is a great fluctuation in prices, depending largely upon the quality.

## Bees and Plants

The weather up to January 1st had not been cold and the bees had ample opportunity for flight, which will help a great deal, but which also probably will mean a bigger consumption of stores. However, bees seem to be in average condition, slightly short in stores, but otherwise all right.

Honey plants have benefited by fall rains and early winter snows which fell before the ground was heavily frozen. Honey plants on the whole should look well when the spring season comes. In fact, probably better than a year ago.

## Honey for the Army Footballers

Time Magazine in its October 25 issue remarks on the Army football team as follows:—"At 5:50 A. M. the day they played Harvard, Army's footballers rolled out of bed. Like the other 2,377 cadets, they made their beds and tidied up. At 8:00, they attended classes, and then had a combined breakfast-lunch (honey, whole wheat toast, steak and milk.)"

## Removing Moisture to Prevent Fermentation

W. J. Fix and T. Palmer Jones, of New Zealand, have made experiments in removing excess moisture from honey to prevent fermentation according to The New Zealand Journal of Agriculture, June 1947. A good, well-heated drying room will not only remove the excess moisture from tank honey but also from honey in combs, even when it is capped, according to their reports.

# All Around the Bee Yard

Looking out of the window there is already a heavy covering of snow on the ground and more coming down steadily. It seems a long way from winter to the first days of spring. The bees, however, have not suffered from winter in this vicinity. With abundance of stores, good colonies and mild weather there is very little likelihood that at this date there can be any winter losses unless it be from starvation.

\*\*\*\*\*

Starvation will be again the major cause of severe losses in the spring of 1949. Through the Midwest crops were short and in many yards there were no crops at all. Because of the desire not to add expense in a year when everything that was spent resulted in an unpaid debt, many yards were left short of food in the fall with the hopes that somehow they would get by until it became necessary to feed them in the spring.

\*\*\*\*\*

Pollen stores were also short this past fall and so it may be wise this year to feed a pollen substitute or a pollen supplement beginning at an early date to boost early brood in colonies which otherwise might suffer severely from the loss of adult population before there are sufficient new bees to carry the colony forward successfully to the honeyflow. This always results in severe dwindling and the consequent hold-back in colony growth.

All of this comes from looking out of the window and watching this snow. It is a soft, mild snow, however, and looking into the top entrances shows movement of bees at the inner side of the entrances so they cannot be clustered very tightly. Regardless of what others may think, since adopting the top entrance together with a small lower entrance we have had practically no winter loss except from starvation or from the loss of colonies which should not have been put into winter in the first place.

\*\*\*\*\*

Just looked out the south window and saw the pilot lights go on out-

## G. H. Cale

side the heat-controlled colonies. There are a hundred or more nuclei wintering four to a heater with a line of ten heaters controlled at one end by a thermostat. They are doing famously and our experience last year with this plan resulted in five comb nuclei in the spring that were early up to full strength and had to be transferred in April into hives. They gave a good account of themselves in making strong colonies. However, there was no flow and so their productive power as a result of this plan of wintering was not determined. We did sell some nuclei produced in this way at a good price and those who received them gave very favorable reports of their production.

\*\*\*\*\*

Just been going over the manuscript for price support, found on earlier pages of this issue. From my desk it looks as though if all other minor commodities are going to receive support on what may be called a cost-of-production basis, honey should also be considered along with everything else.

However, to return to the beekeeper a price which will guarantee him a profit at the expense of the tax payer is something in which I do not believe.

The beekeeper must advance his own markets and make his own progress. If he cannot do it by himself he should join with others in doing it through the Federation or through the Institute or both or use satisfactory individual advertising so that eventually he can stand on his own feet.

I do feel that everybody should get behind the new American Beekeeping Federation. It is the first time in a long history in which I have been personally going through the mill that we have had a chance to support an organization which represents the entire industry and which I am sure will represent it in an effective manner in all phases of its interests. Whether or not it succeeds will depend on every one of us. If it fails it will be the fault of every one of us.

And if it fails it will show that collectively beekeepers perhaps are not worth the effectiveness which national efforts are bound to bring to the industry or they are not hard enough hit economically to feel that they must work with others for a common good.

If it fails it will also be a long time, I am sure, before a similar attempt will again be possible and be equally qualified to succeed.

\*\*\*\*\*

At the editorial desk we are often accused of emphasizing the marketing of honey too much. We are told that there are many beekeepers who are not interested in marketing. That is hardly true. Except for the very small beekeeper who is a fancier or who keeps bees for an outdoor hobby and disposes of his honey among friends, practically all beekeepers, large and small, are interested in the sale of honey at a profit. Many small beekeepers have told me that the money they obtain from beekeeping has meant many things for their families which their full-time occupation did not provide, such as life insurance, new automobiles, payment of debts, doctor's bills, and other similar items.

We are asked, "Where is the old interest in bee behavior?" That without an understanding of bee behavior we cannot understand honey production and if honey production fails there is no economic basis for survival. Well I think there is plenty of emphasis these days on bee behavior with pollen supplements and substitutes, two-queen systems, and variations of management to bring about co-ordination between the peak of colony production and the honeyflow; with emphasis on breeding better bees, and emphasis on pollination, all of which are strictly behavior problems, it seems to me that we are doing a pretty good job along this line.

\*\*\*\*\*

An interesting question came up in the office recently. Perhaps our readers would like to give their answers to the same question. **In the order of their importance, what traits do you believe to be important in the honeybee?** Let's have some answers to that question and see if we all think alike.

# Previews of Coming Events

## **Kansas Manhattan Advanced Beekeepers' Program Wednesday, February 2, 1949 Room 102, Fairchild Hall Morning Session**

R. L. Parker, Professor of Apiculture and State Apiarist, presiding.  
9:00—Apiary Inspection in 1948—R. L. Parker.

9:15—Simple Records for Beekeepers—Leo M. Hoover, Instructor, Department of Economics, Kansas State College.

10:00—Distribution and Control of Sweet Clover Weevil in the United States—Roger C. Smith, Head, Department of Entomology, K. S. C.

10:45—Honey Production versus Honey Marketing—R. L. Parker.

11:30—Lunch hour.

### **Afternoon Session**

Roger C. Smith, Head, Department of Entomology, presiding.

1:30—Principles of Cost of Marketing—Paul L. Kelley, Assistant Professor, Department of Economics, K. S. C.

2:00—Methods of Honey Marketing—R. L. Parker.

2:45—Panel Discussion — Honey Marketing—R. L. Parker, leader.

3:30—Visit to the Kansas Agricultural Experiment Station Apiary.

## **\*\*\*\*\* Beginning Beekeepers' Program Wednesday, February 2, 1949 Room 202, Fairchild Hall Morning Session**

James B. Kring, Graduate Assistant in Entomology, K. S. C., presiding.

9:20—What is Beekeeping?—G. A. Bieberdorf, Assistant Professor of Entomology, Oklahoma A & M College, Stillwater, Oklahoma.

10:00—Colony Need of the Year—W. W. Franklin, Instructor, Kansas Agricultural Experiment Station.

10:45—Honeybees at Work—Part I—Motion pictures.

11:30—Lunch hour.

### **Afternoon Session**

H. R. Bryson Associate Professor of Entomology, K. S. C., presiding.

1:30—Types of Honey Production—Robert C. Yapp, Beekeeper and Student Assistant.

2:00—Panel Discussion — Colony Manipulation and Examination—G. A. Bieberdorf.

2:45—Honeybees at Work—Part II

—Motion pictures.

3:30—Visit to the Kansas Agricultural Experiment Station Apiary.

## **Beekeeping Short Course at the University of Minnesota**

There will be a Beekeeping Short Course during the Farm and Home Week, February 1-4, 1949, at University Farm, St. Paul, Minnesota.

The structure and life story of honey bees and their relatives will be discussed. Further talks will include: the methods of apiary management throughout the year, queen rearing, pollen substitutes, pests affecting honey plants, honey as food, the value of bees in pollination of agricultural plants, bee diseases and enemies. Motion picture of beekeeping and round table discussion will end the program.

The speakers include: Rev. C. G. Langley of Red Wing, Minnesota; C. D. Floyd, State Apiarist; Dr. H. E. Milliron and Prof. M. H. Haydak of the University of Minnesota.

## **Cook-DuPage (Illinois) February 12, Art Institute, Chicago**

The Cook-DuPage Beekeepers Association will hold its 28th annual meeting and banquet Saturday afternoon and evening, February 12th, 1949 at the Art Institute, Adams Street and Michigan Blvd., Chicago, Illinois. The meeting will be at 3:00 P. M., followed by a turkey dinner at 6:30 P. M. There will be a charge of \$2.50 per plate for dinner. For reservations write A. J. Smith, Box 234, Worth, Illinois.

## **Western Missouri—February 13**

Our next regular meeting will be held February 13 at 812 Westport Road, Kansas City, at 2:30 P. M. After the meeting Mr. and Mrs. Paul Brecheisen, members of our association, will entertain with music and refreshments will be served.

On December 5th, at our election of officers, J. C. Dods was elected president; Henry Schaffer, vice-president; Mrs. Schaffer, secretary-treasurer; L. A. Smart, auditor; advisory board: John Laury, Joseph Gettler and Byran Smith. Three automatically retained are J. R. Jones, Dr. F. L. Laffon and W. F.

Matthes. The advisory board holds office for two years, three new members being voted each year. Field representatives are William Brite, A. O. Kingsbury and publicity agent is H. F. Pennington.

Mrs. H. J. Schaffer, Sec'y-Treas.

## **Westchester County (N. Y.) February 20, New Rochelle, N. Y.**

The Westchester County Beekeepers' Association will hold its regular monthly meeting at 2:30 P. M. on Sunday, February 20, 1949, at the Odd Fellows Hall, 20 Lockwood Avenue, New Rochelle, N. Y.

Instructions will be given regarding early spring feeding of bees, after which movies will be shown. Refreshments will be served and visitors are always welcome.

B. F. Miller, Publicity.

## **Meeting of Bee Industries Ass'n.**

The Bee Industries Association met at St. Louis on Dec. 13 with Alan I. Root, chairman, presiding. The chief topic of discussion was the possibility of reducing prices on all kinds of bee supplies. The proper grades of lumber for manufacturing bee supplies, however, have not decreased in price and while there seems to be a shortage of the grades necessary, they are still available. Because of the low price and comparatively slow movement of honey, practically all representatives of manufacturers present at this meeting seemed to be of the opinion that bee supplies would sell comparatively slowly with the exception possibly of items absolutely necessary for regular production.

A resolution was passed that the Bee Industries Association offer a prize of \$1,000 for the development of a new use for honey. This prize to be put in the hands of a committee consisting of Baxter Woodman, Robert Dadant, and M. S. Stone. Further announcement of details of this offer will no doubt appear after the committee has met and decided on the terms for the allotment of this particular prize.

The same officers of the Association were reelected, Alan I. Root, chairman; Baxter Woodman, treasurer; and R. H. Dadant, secretary.



# The Postscript

1949—It takes a bit of time to adjust oneself to remember that 1948 has passed into history. How short has been the year and how quickly did 1949 follow after 1947. With the coming of the new year I am reminded that 1949 is bringing my 70th birthday as well as 47th wedding anniversary. It seems but yesterday when C. P. Dadant reached his 70th birthday in 1923. Then those of us who were younger felt that the best of life was still ahead. Now we are at the point that he was then. The surprising thing about reaching 70 is that you get there so soon.

Three score and ten has always been held up to us as the summit of the years. Anything beyond that is offered as an extra dividend coming only to the favored few. Fortunately some men like L. H. Bailey, world's most famous horticulturist, refuse to grow old. At 90 he is still visiting far places in an effort to expand the ever growing field of knowledge concerning plants. Some of his best work has been done after he had reached 70. Bailey appears to use the past only as a foundation on which to construct a more generous future.

At this point there is much of interest in reviewing the events of the past in an effort to forecast what lies ahead for the beekeeper of the future. The honey producer now occupies a

## Frank C. Pellett

place of importance in the consciousness of agricultural leaders undreamed of in the past. The pioneer period is past and the changes that have come have brought the honeybee into surprising prominence because of her services in pollination. Intensive cultivation of large areas and the use of poison in the control of insect pests have resulted in the disappearance of large numbers of wild pollinating insects which served so well in the past. Since the honeybee is the only pollinating insect whose numbers can be controlled her prosperity has become of national interest.

It now appears that the breeding programs which are so new in the beekeeping field may easily become the projects of greatest importance. The use of hybrid corn is bringing a revolution to corn belt agriculture and it may well be possible that comparable increase in the honey harvest may come from hybrid bees.

If hybrid bees give as great a boost to production as hybrid corn has done we can look for poor locations to yield paying crops and big yields in the good location.

We would like our readers' opinions on this subject. In order of their importance, what traits do you believe to be of great signifi-

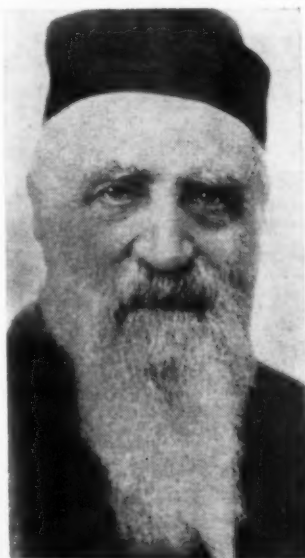
cance for commercial honey production.

If I may be permitted to make a forecast it is that the greatest changes will come in our relation to bee pasture. The beekeeper has always assumed that there is nothing to be done about improving the pasture and that when it is poor he can only move in search of something better.

Within my lifetime I have seen three changes in the bee pasture in the Iowa community where I was born. In my early years the native plants on the prairie on which pioneer beemen depended were going out and the white Dutch clover was replacing them. The white clover provided good bee pasture for about thirty years. 1915 and 1916 were years of big crops from white clover. Since then it has yielded only occasionally and much less liberally.

Now we find ourselves in the midst of another great change. Sweet clover has disappeared from many neighborhoods where it was most abundant and is appearing in new localities where it has been unknown. Many of the large outfits are hard put to find sufficient pasture to support so many bees. Many are concerned for fear that the large acreage of good pasture necessary to support them may not be found again.

## 1863 — 1949



The business started by Charles Dadant in 1863 ceased to be a family partnership in 1948 and became a corporation with near 100 employees. First known as Charles Dadant it soon became Charles Dadant & Son. When the men of the third generation took hold it became Dadant & Sons. Charles Dadant II of the fourth generation is the youngest member of the family to join the staff. I became associated with the firm as assistant to his grandfather before Charles II was born. The growth of this firm is typical of honey production as I have seen it develop from an unimportant sideline with a few bees in box hives to a commercial enterprise of large extent. With the children of the fifth generation growing up, I am wondering what it will be like when they take over.

The newest member of the fifth generation is Thomas Brooks Dadant, son of Phillip and grandson of Maurice, who arrived on January 10.





## Italian Bees and Queens

WRITE FOR PRICES  
**WICHT APIARIES**  
408 Miller St., Hattiesburg, Miss.

### BLUE RIBBON

## Package Bees and Italian Queens

Booked full to April 20th.  
Write for prices.

**FOSTER APIARIES**  
COLUSA, CALIFORNIA  
Successor to Thos. C. Burleson

### McCORD FRAME-GRIP



Saves time and energy for beekeepers large or small. A light weight handy instrument used for loosening and removing the frames from the hive with one hand.

Price \$3.00 plus 18c postage fee. Satisfactory dealer discounts.

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### YELLOW ITALIANS

## AT \$3.75 A PACKAGE

Now is the time to place your order (large or small) for your share of our prolific strain of large yellow bees and queens. As gentle as bees get, good honey gatherers and pollinators. Live delivery and health certificate guaranteed with each shipment. 10% reserves shipping date. No C.O.D. accepted.

With young queen	2-lb.	3-lb.
1 to 24 (each)	\$4.00	\$5.00
25 to 49 (each)	3.90	4.90
50 up	3.75	4.75

**PLAUCHE BEE FARMS**  
HAMBURG, LOUISIANA

### "WORMS UNLIMITED"

raising earthworms can be an interesting hobby and profitable too.

Let us tell you how raising earthworms will fit into your beekeeping work for greater profits, improving your soil, increasing crop yield. Results are phenomenal! Write for free information:

**Holzon Enterprises**  
1108 Leland Ave., Chicago 40, Illinois

### Package Bees and Queens

Before placing an order for your 1949 requirements, write us for prices on our gentle, hardy, productive 3-Banded Italians.

**Port Gibson Apiaries**  
Port Gibson, Mississippi



## San Antonio Field Meeting

These two pictures were taken at the field day meeting of the San Antonio District Beekeepers' Association held at the apicultural laboratory, San Antonio, on July 25th. The program consisted entirely of demonstrations, contests and a picnic. Top picture shows a smoker lighting contest with Mr. Rice, local inspector, as one of the judges, at the end of the line. About seventy-five attended the meeting. The other picture shows R. S. Bilbrey, President of the Association, putting live bees into his mouth.

F. L. Thomas,  
State Entomologist

## New Bee Book From England

When R. O. B. Manley writes a book it is based on actual experience extending over many years of extensive operations. As one of Great Britain's most extensive honey producers he has a practical viewpoint. "Beekeeping in Britain" is the title of a new book of 439 pages designed to meet the need of either the beginner or the more experienced beekeeper.

His introductory chapter is a most interesting review of beekeeping over the more than forty years since

he first became interested, and recalls many things of memory to those of us who are older.

He proceeds to tell the story of the life and habits of the honeybee, the equipment necessary for successful beekeeping and the management of the apiary according to a pattern of his own. Too many authors copy the work of others and add but little which is original or noteworthy.

The book is very readable, well printed and should prove a welcome addition to the library of any beekeeper. While it deals with conditions in England there is much of interest to the American as well. Copies may be secured from American Bee Journal, at \$4.50, postpaid.

## Nectar and Pollen Plants of Manitoba

An interesting publication to come to the editor's desk is a reprint of an article on the above subject by A. V. Mitchener which appeared in a recent issue of Scientific Agriculture.

Mitchener lists the important plants on which the bees work in his province together with blooming dates. A surprising reduction in acreage of sweet clover is noted. At the high point nearly 300,000 acres were devoted to sweet clover whereas now only 122,000 acres remain. The sweet clover weevil has destroyed whole fields of seedlings soon after they appeared above ground and farmers are less interested in the plant than formerly.

The use of weed killers may greatly reduce other bee pasture plants such as mustard and dandelion. Dandelion is shown to be of major importance and its loss would be a serious blow to beekeeping.

With the decline in bee pasture has come a reduction of about one third in the average yield of honey per colony.

## Wanda, the Honey-fed Girl



This a picture of my little niece, Wanda, who has been a honey-fed girl since birth.

D. R. Green, Florida.



**YOUR CONFIDENCE IN US, PLUS OUR FRIENDLY SERVICE TO YOU** has caused us in the past 20 years to be one of the leading shippers. Try us again this year. Our packages are overweight and our queens are caged in our own yards as pictured above.

2-pound package with young queen	\$3.75
3-pound package with young queen	4.70
4-pound package with young queen	5.50

**CENTRAL LOUISIANA APIARIES**

**Marksville, Louisiana**

## SPEARS' PACKAGE BEES AND QUEENS

For 1949

### QUALITY BRED ITALIANS

Carefully selected and bred from best stock available in Louisiana, which insures hardiness, vigorousness, and prolificness. Our bees are very quiet; are light yellow in color and are excellent workers, fresh from Southern hives used only to shake bees, assuring you of only young, vigorous workers. Insure success in '49 with bees from Spears' Apiaries.

Place your orders early to get your shipping date when wanted. We solicit and appreciate all orders, whether for a few packages or several hundred. Live delivery is guaranteed, satisfaction assured and a health certificate accompanies each order.

Insure delivery on the date desired by sending us your orders now. All correspondence will be treated with equal courtesy and promptness.

Quantity	2-lb. Pkg.	3-lb. Pkg.	4-lb. Pkg.	QUEENS
1-24	\$3.95	\$4.95	\$6.10	\$1.00
25-up	3.75	4.80	5.90	

10% deposit, balance sent before shipping date.

**SPEARS' APIARIES, Hamburg, Louisiana**

## YELLOW ITALIAN BEES AND QUEENS

We are now booking orders for package bees and queens. We will be ready to start shipping April 1st. We guarantee you live delivery; full weight packages of young bees, each package of bees will be headed by a young queen; a health certificate with each order, and above all we guarantee you satisfaction. We require a 10% deposit to book your order, balance 10 days before shipping date. OUR PRICES ARE:

	2-lbs.	3-lbs.	4-lbs.	5-lbs.	Queens
1-9	\$3.80 each	\$4.80 each	\$5.80 each	\$6.80 each	\$1.00 each
10-24	3.70 each	4.70 each	5.70 each	6.70 each	.90 each
25-49	3.60 each	4.60 each	5.60 each	6.60 each	.85 each
50-up	3.50 each	4.50 each	5.50 each	6.50 each	.80 each

**OSCAR ARNOUVILLE**

**Box 35, Hamburg, Louisiana**

## QUEENS—PACKAGE BEES FOR 1949

ESTABLISHED 1883

Maximum production is most easily assured with superior bees and queens. That's one way we try to help you make money. Superior bees and queens is our motto at all times. We like to have 50 per cent deposit and balance before shipping date. We believe this is fair to all—as we like to plan and ship the day you want shipment. Price scale:

	1 to 10	10 to 50	50 to 100	100 up
2-lb. package and queen	\$4.50	\$4.30	\$4.10	\$4.00
3-lb. package and queen	5.50	5.30	5.10	5.00
All untested queens	\$1.25			Tested queens \$2.00

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# TANQUARY'S ITALIAN BEES AND QUEENS FOR 1949

ORDERS NEVER TOO LARGE OR TOO SMALL

We figure that our prices are in line with present conditions and we urge you to check your equipment and place your order now for your packages and queens. Satisfaction guaranteed.

• ORDER EARLY •

Quantity	Queens	2-Lb. Pkgs.	3-Lb. Pkgs.	4-Lb. Pkgs.	5-Lb. Pkgs.
1 to 24	\$1.25	\$4.00	\$5.10	\$6.20	\$7.25
25 to 99	1.15	3.75	4.80	5.80	6.85
100-up	1.00	3.50	4.50	5.50	6.50
TESTED	\$2.00 each				

Breeder Queens shipped with 2-lb. Bees, Express Collect  
\$8.00 each

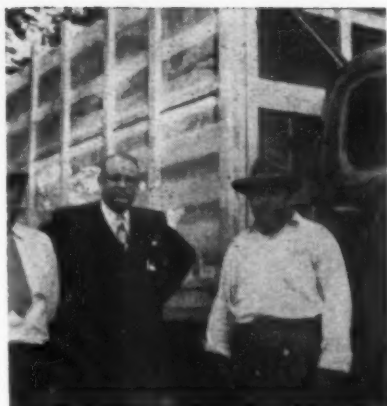
Price of queenless packages deduct price of queen.

Queens Postpaid—Packages bees F. O. B.  
Health Certificate with each shipment.

**TANQUARY HONEY FARMS, Inc.**  
**LENA, SOUTH CAROLINA**

WESTERN UNION, LENA, S. C.

TELEPHONE: ESTILL, S. C. 109



## In Arkansas

J. H. Davis sends this snap showing H. L. Scott, beekeeper, at the left; J. H. Davis, Apiary Inspector, in center; and J. E. Gooch, member of the state Apiary Board, standing by Mr. Gooch's bee truck.

## The History of a Breeding Project

(Continued from page 69)

Of these seven, all but one developed American foulbrood to a greater or lesser extent following inoculation. Surely this was not an auspicious start.

But one colony out of 25 had remained entirely free of disease.

Look at the questions and doubts which plagued them. Was resistance a characteristic of one race; of all races; or of two or more races combined? Could a bee show resistance to one particular strain of *Bacillus* larvae and still fall prey to the ravages of a more virulent strain? Was the character of resistance an inheritable one? Was it a simple Mendelian character? Question followed question—and for most of them there was as yet no answer known.

In the "Transactions of the Iowa Horticultural Society," Volume 70, 1935, Dr. O. W. Park reported the results of that first year's work. His concluding remarks I believe, are the key to the desires and hopes of the cooperators: "It is concluded, therefore, (1) that variation in resistance to American foulbrood does exist in honeybees. The immediate objective of this investigation has, then, been reached. It is concluded, also (2) that marked resistance has been demonstrated by several colonies, and therefore, that our ultimate goal, a strain of bees which will breed true for resistance, holds possibilities which challenge our best efforts.

## BE PREPARED

Get all your idle equipment cleaned and painted, ready to receive those extra heavy packages of bees. Write us how many packages you are going to need, and dates you would like to have them shipped to you. It will make you smile when you open and look into the hives at the wonderful job those bees and queens are doing that you received from the LUCEDALE APIARIES. THEY ARE GOOD.

## Three-Banded Italian Bees and, Queens

We know how to please you. No deposit required for booking. Live delivery and satisfaction guaranteed.

LUCEDALE APIARIES

Lucedale, Mississippi

## Package Bees Italian Queens for 1949

From BURLESON you get:

1. Queens from proven high producing stock.
2. Overweight packages.
3. Choice of shipping dates April 1st to May 10th.
4. Bees free from disease with health certificate.
5. Guaranteed live delivery.

Write, letting us quote you on your needs. If you still have honey on hand we will take it in payment—just send sample.

## T. W. Burleson & Son

Established 1909

Waxahachie, Texas

## A NEW TYPE QUEENBEE FOR YOU IN 1949

NORTHERN BRED Pure all Italian Hybrids. Six generations of controlled instrumental mating have gone into this attempt to breed a better bee for you. Progeny tested for honey production, uniformity, resistance to the foulbroods, gentleness, and other valuable qualities.

### LIVE DELIVERY GUARANTEED ON EVERY SHIPMENT

	Queens	2-lb.	3-lb.	4-lb.
1-24	\$1.85	\$4.50	\$5.55	\$6.60
25-99	1.55	4.25	5.25	6.25
100-up	1.40	4.00	4.95	5.90

Please include 10% deposit with order.

THE RICH HONEY FARMS

Jeanerette, La.



WE  
SPECIALIZE  
IN



## Fancy Comb Honey Production and Pollen Supplements

COMB HONEY QUEENS. (Queens that have been bred especially for comb honey for over twenty-five years). Comb Honey Equipment, Soy Flour, Pollen Traps, Brewers' Yeast, and Pre-Mix Supplement.

KILLION & SONS APIARIES

Paris, Illinois

Choose Your Labels Wisely—American Bee Journal

## A NEW TYPE QUEEN BEE

Six generations of controlled mating and careful research work has gone into the production of these northern bred, all-Italian hybrids. Progeny tested for honey production, temper, resistance to foulbrood, and other valuable qualities. WRITE FOR PRICES.

**J. M. CUTTS & SONS**

**Chipley, Florida**

## YELLOW ITALIAN BEES

Every package headed by large type young golden or very lightly banded queen. We send 10% of queens in package free as extras 15 days after shipment leaves to insure you a good start for a better crop.

**PRICES** 2-lbs. package with queen ..... \$3.75  
3-lbs. package with queen ..... 4.75  
Extra queens, 1 to 4, \$1.25; 5 or over \$1.00.  
Neals' packages of 4 combs (pollen, brood and honey) \$7.50 each.  
20% books orders.

**NEALS' APIARIES**

**Hamburg, La.**

## A. I. ROOT COMPANY OF CHICAGO

### Italian Package Bees and Queens for 1949

	1-24	25 or more
2-lb. package with queen	\$4.50	\$4.25
3-lb. package with queen	5.60	5.30
4-lb. package with queen	6.70	6.30
5-lb. package with queen	7.75	7.25
Queens	1.35	1.25

Tested queens \$2.00 each.

**ORDER EARLY.**

Queens postpaid. Packages by Express. F.O.B. Shipping Point. For queenless packages deduct the price of the queen.

Health certificate with each shipment. Live delivery guaranteed.

Write for prices on Caucasian and Carniolan bees. Order from Chicago: bees shipped from our southern shipper.

## A. I. ROOT COMPANY OF CHICAGO

224-230 W. HURON ST., CHICAGO, ILLINOIS, DEPT. 2S

### OUR 38TH YEAR

### 500,000 QUEENS

### 200,000 PACKAGES

Have been shipped to beekeepers in 37 years. Let MERRILL'S BEES and QUEENS increase your 1949 honey crop.

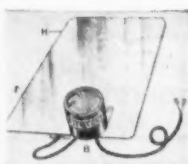
### ITALIANS

	Queens	2-lb.	3-lb.	4-lb.	5-lb.
1-24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25-99	1.30	4.25	5.30	6.30	7.40
100 up	1.20	4.00	5.00	6.00	7.00

If queenless packages are wanted deduct price of queens. No charges for clipping or air mailing queens.

MERRILL BEE COMPANY, State Line, Mississippi

Mississippi's Oldest Shipper



## YOU WILL BE INTERESTED

in what a leading authority suggested in regard to Bee-Lyon Warmers:

- "1. The heaters are excellent for building up packages rapidly in spring.
- "2. They are good for wintering nuclei and choice queens in nuclei.
- "3. They are desirable for real early brood in Spring for the colony advance as well as for queen rearing.
- "4. Invaluable for late fall queen rearing.

We have used some of these in this way this year. We see the value of hive heating both in spring and fall."

Send for Free Literature on Bee-Lyon Warmers with Automatic Temperature Control. Write to:

**LYON RURAL ELECTRIC CO.**

DEPT. BJ, SAN DIEGO 12, CALIFORNIA

## A-B-J Ads Are Result Getters



## W. E. Shade Writes

At present I have three races, Caucasians, resistants, and Italians. I did not like the Carniolans, so I requeened them all with Caucasian queens. All my bees wintered 100%, coming through the winter (1948) very strong. Some I wintered in three bodies, some in two. At present I am running all my colonies in three brood chambers, with shallow supers for surplus honey, without excluders. I find they do better this way and the nectar piles in faster. The picture shows one of my colonies wintering in three brood chambers, with an upper hole in the center. I find they winter better this way than with the hole in the top.

W. E. Shade.—Ontario.

## Crossing with Indica and Dorsata

Discussion in India on the possibility of crossing both *Apis indica* (6 cells to inch) as well as *Apis dorsata* (giant bee of India) with *Apis mellifica* is given in the Indian Bee Journal. R. M. Mutto, the editor, while he acknowledges the possibility of domesticating the giant bee, warns of the danger of these bees to third persons. They are extremely vicious and have been known to kill even an elephant. Mutto recommends selective breeding of *Apis indica*, or perhaps the judicious importation of selective strains of *Apis mellifica*, like those reared for disease resistance.



## LITTLE & MOORE APIARIES

ORIGINALLY

LITTLE'S APIARIES

### The JOHN M. DAVIS STRAIN Italian Queens



Guaranteed to please  
or money refunded.

April 15th to June 1st,  
1 to 10, \$1.25 each  
June 1st to November  
1st, \$1.00 each,  
any number.

**LITTLE & MOORE APIARIES**  
SHELBYVILLE, TENNESSEE  
Where Quality Reigns



**Fast,  
Reliable,  
Labor  
Savers**

At Your Dealers

**PORTER BEE ESCAPE**

LEWISTOWN, ILLINOIS

BOX 89



### QUEENS—QUEENS AND PACKAGE BEES

All shipped in new cages

2-lb. package and queen .....\$4.00 each  
3-lb. package and queen ..... 5.00 each

Untested Queens

1 to 25 .....\$1.25 each  
25 to 50 ..... 1.20 each  
50 up ..... 1.15 each  
Select tested queens ..... 2.00 each

Satisfaction guaranteed.

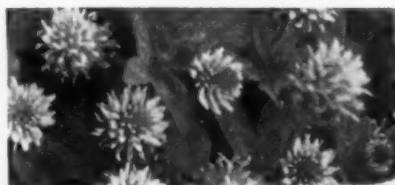
### Alamance Bee Company

Geo. E. Curtis, Mgr.

Graham, N. C.

## PELLETT CLOVER

START WITH LIVE PLANTS



Spreads rapidly from deep roots and in-  
creases from year to year. Blooms in June  
and July. Very attractive to bees. Root  
divisions may be planted in early spring.  
Root divisions—25, \$2.00; 100, \$5.00; 250,  
\$10.00; 500, \$18.00 postpaid.

**MELVIN PELLETT**

ATLANTIC, IOWA

HIGH QUALITY

### Italian Bees and Queens

If you want High Quality Queens  
and Package Bees for 1946, at a  
reasonable price, send your inquiry  
and requirements to

**Carlus T. Harper**

NEW BROCKTON, ALABAMA

## ITALIAN QUEENS . . . BEES

Line bred since 1927. Queens raised from stock of 200 to 300 lbs. after pulling  
bees all spring up into July. Queens mated to drones from similar selection. Give  
me your orders early to assure your preferred shipping date.

2-lb. bees with queen .....\$4.50  
3-lb. bees with queen ..... 5.50  
Queens ..... 1.35

4-frame nucs 2 to hive bodies \$7.00 each,  
you furnish body.  
Health certificate with all  
shipments.

**HOMER W. RICHARD**

EL DORADO, ARKANSAS  
AFTER MARCH 1ST GOULD, ARKANSAS



## ITALIAN QUEENS & PACKAGE BEES Bred for Honey Production

Beekeeping is no side line with us. We operate 12 months a year  
devoting all our time to beekeeping. Being honey producers as well  
as package shippers, we have a chance to test our queens in honey  
production before they can qualify as breeders in the queen yards. We  
offer you a Resistant Strain of Italian bees, line bred in our Apiaries  
for honey production.

YOUR SATISFACTION IS OUR SUCCESS

Two pound package with queen .....\$4.00 each  
Three pound package with queen ..... 5.00 each  
Queens ..... 1.20 each

Write for prices on quantity shipments.

Live delivery guaranteed.

## SOUTHLAND APIARIES, Ball, La., U. S. A.

Western Union, Alexandria, La.

Tel., Alexandria Exchange 2-3293

## QUEENS-Packages 3-Banded Italians

FREE OF DISEASE—10% BOOKS ORDER

PRICES AS FOLLOWS ON 1 TO 25 PACKAGES

2-lb. and young laying queen (each) .....\$3.75  
3-lb. and young laying queen (each) ..... 4.75  
4-lb. and young laying queen (each) ..... 5.75  
Queens, (Postpaid) ..... 1.00

Queenless packages, subtract price of queen.  
Efficient—Rapid—Honest Service.



**EELLS HONEY & BEE CO., Houma, La., U.S.A.**

"IN THE SUNNY SOUTH"

## ITALIANS AND CAUCASIANS

Bred to Italian Drones

Our leather-colored Italians are bred for their honey producing and good winter-  
ing qualities. For those who prefer the Caucasians we breed them in separate  
queen yards. In 1946 we shipped package bees to Fairbanks, Alaska and our  
customer says they arrived in good condition. We guarantee safe arrival.



2-lb. with queen .....\$3.75 1-24 25 and up  
3-lb. with queen ..... 4.75 \$3.50 \$3.50  
4-lb. with queen ..... 5.75 4.50 4.50

Extra queens, any number, \$1.00 each.

20% down books your order, balance 10 days before shipping.

**LOUIS L. COUCH**

Pineville, Louisiana

"The Village Beekeeper"

**Renew Your Subscription Now To A-B-J**

# SHARE OUR MARKET



# WE SELL HONEY

## TO THE WORLD



### How to Sell Us Your Honey

1. Send us a good sized sample, labeled with your name and address and the quantity it represents.
2. Sample should be exactly as the honey is in your containers. If more than one grade, send samples of each.
3. Advise if the honey is packed in new or in used containers. We are not interested in retail packages.
4. Carload lots may be shipped draft basis, bill of lading inscribed "permit inspection."
5. Our reference—your bank.



**R. B. WILLSON, Inc.**

150 East 35th St., New York (16), N. Y.

Telephone Murray Hill 3-3437



## PACKAGE BEES

Our package unit located at Sylvester, Georgia, is in better shape to serve our '49 customers than it has been in our 20 years' shipping experience. Most of our 2,600 colonies here are full young bees and stores. We have some open dates in April and May. Book yours NOW!

## QUEENS

We have employed one of the South's most experienced queen breeders. Our queen yards in central Florida and South Georgia INSURE shipment of your orders on dates desired. Queens mailed after March 10th.

### PRICES

3-lb. package and queen, 1 to 10	\$5.00
10 or more	4.75
2-lb. package and queen (any number)	4.00
Queens, 1 to 10	1.25
10 or more	1.00
Booster packages—deduct price of queen.	

**HYLAND APIARIES**

Sylvester, Georgia

## NOTICE

We are soliciting new customers for our rapidly expanding package bee business.

We offer:

### QUEENS

reared directly from the egg! NOT grafted. The few minutes of disturbance, caused by grafting, represent a long period of interruption in development for the fast growing queen larvae.

### ITALIAN STOCK

that is carefully selected. We produce both comb and extracted honey as well as package bees and queens. Our breeding queens and drone colonies are selected primary for their productiveness and white wax work with due consideration for gentleness and uniformity of markings.

### EARLY SPRING DELIVERY

Our shipping season begins about March 1st.

### FULL VALUE FOR YOUR DOLLAR

20% overweight is included to cover shrinkage of packages in shipment. One extra queen is included with each twenty-five packages ordered.

From the caging of the queens to the delivery of the packages at the express office no effort is spared to see that you get the finest quality bees and queens in the best possible condition on the date specified.

Write now for available shipping dates.

Price per 3-lb. package of bees with queen \$5.00  
Queens 1.50

**BROSE & STEVENS APIARIES**

P. O. BOX 36

FELTON, CALIF.

## QUALITY BRED ITALIANS

# York's Package Bees & Queens For 1949

The Strain Preferred By Leading Honey Producers

The past season has come and gone and we wish to thank you for your patronage. We are now working for the 1949 season, sparing no expense to provide you with package bees and queens that give the most in satisfaction. Our bees have won a national reputation with honey producers as the best foundation stock that can be obtained. Ask any of our customers. Order direct from this advertisement to save time. Order now to reserve your shipping date.

### PACKAGE BEES WITH YOUNG LAYING QUEEN

Quantity	1-24	25-99	100-up
2-lb. package	\$4.50 each	\$4.25 each	\$4.00 each
3-lb. package	5.60 each	5.30 each	5.00 each
4-lb. package	6.70 each	6.35 each	6.00 each
5-lb. package	7.80 each	7.40 each	7.00 each
Extra queens	1.40 each	1.30 each	1.20 each

For queenless packages, deduct price of queen. For tested queens, add \$1.00.

Only neat new cages are used for bees, certified bees from our own apiaries, state registered and state inspected. Package bees by express, queens not with packages by mail. We recommend 3-lb. packages as the best all-around size. Queens are young, bred from carefully selected breeder queens and mated to drones from selected queens. If convenient, small orders cash, larger orders \$1.00 deposit per package to insure shipping date. Shipments will begin as early as weather permits, usually about April 1. Help us to help you by booking your order now.

## York Bee Company : Jesup, Ga., U.S.A.

(The Universal Apiaries)

### Light Colored ITALIAN PACKAGE BEES and QUEENS

If you want satisfaction in bees that's what we try to give—Quiet Bees, Healthy Bees, Young Bees, Extra Weight, Immediate Service, Fair Prices. We think we have done an excellent job of shipping bees all over the U. S. A. and Canada for many years but we are always trying to improve both stock and service. Live delivery is always guaranteed and a health certificate accompanies each package.

10% deposit, balance 10 days before shipping date.

2-lb. package with queen	\$3.75
3-lb. package with queen	4.75
4-lb. package with queen	5.75
Queens	1.15

Write for discount on large orders.

E. J. BORDELON APIARIES

Box 33, Moreauville, La.

## Package Bees and Queens : April and May Delivery

As honey prices go down and package bee prices remain up due to high cost of material, labor and etc., you can do something about it by purchasing bees and queens that will arrive in first class condition, build up quickly and store a good surplus. Our THREE-BANDED ITALIANS are guaranteed to be good and are backed by 25 years' experience as a shipper.



	1-24	25-99	100 or more
2-lb. with queen	\$4.50 each	\$4.25 each	\$4.00 each
3-lb. with queen	5.60 each	5.35 each	5.10 each
Select-Untested queens	1.40 each	1.30 each	1.20 each

25% with order, balance just before shipment is made.

THE CROWVILLE APIARIES

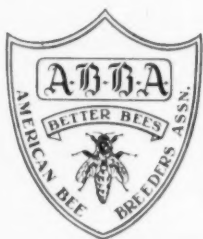
Rt. 1, Winnsboro, Louisiana



# Puett's Packages and Queens

PRICES—	1 to 9	10 to 49	50 to 99	100 & above
2-lb. package with queen	\$4.60	\$4.35	\$4.15	\$4.00
3-lb. package with queen	5.60	5.35	5.15	5.00
4-lb. package with queen	6.60	6.35	6.15	6.00
Extra queens—\$1.25 untested, \$2.00 tested. For queenless packages deduct \$1.25.				
Loose-Queen packages (late shipment only) add \$1.00.				

\$1.00 deposit holds shipping date, balance payable before shipment. Refunded if cancelled 10 days before shipping date.



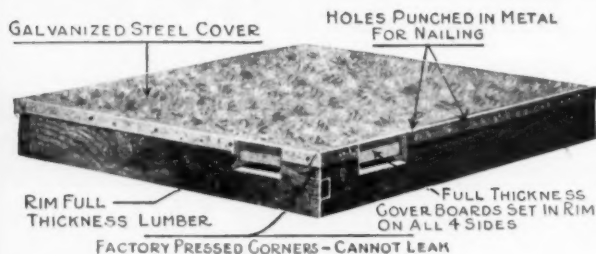
Puett now manufacturing division board feeders. Made of Masonite, glued and nailed to gum frame.

PRICE—75 Cents

## The Puett Co.

Dept. A

Hahira, Ga.



## Galvanized Steel Covering is Back

We again have GALVANIZED STEEL covering for our telescoping covers and complete hives. Galvanized steel will not tear nor dent like aluminum and paper and when painted white will give a lower hive temperature than any other covering.

We have all catalogue items in vast quantity. While our quality is superior our prices are lower because you save the dealer's profit. Get our prices before you buy any bee equipment.

**WALTER T. KELLEY CO. : Box 210 : Paducah, Ky.**

## GOOCH'S BEST ITALIAN PACKAGES AND QUEENS

To prove to you that our bees and queens live up to the excellent reputation they have built for themselves, let us mail you copies of unsolicited letters praising their performance. Whether you place an order or not, remember, we always enjoy hearing from you.

2-lb. package with queen	LOTS 1-10	\$4.40
3-lb. package with queen		5.50
QUEENS (each)		1.35

Write for special discount on large orders.  
Full weight, live delivery and

**SATISFACTION GUARANTEED**

**JESSE E. GOOCH & SONS**

**Route 3, Pine Bluff, Arkansas**

## ITALIAN PACKAGE BEES AND QUEENS FOR 1949—

**RESERVE YOUR SHIPPING DATE FOR THE COMING SEASON.**

Write us for your estimated needs and quotations.

**Safe, Reliable, Dependable Service.**

**B. J. BORDELON APIARIES**

**Moreauville, Louisiana**

## ● ITALIAN BEES AND QUEENS ●

We are booking orders for spring 1949. Only 20% with order, balance ten (10) days before shipping date. Health certificate with each shipment and live arrival guaranteed. 2-lb., pkgs. with queen \$3.50; 3-lb., \$4.50; 4-lb., \$5.50.

### RED DIAMOND APIARIES MANSURA, LOUISIANA

## WESTERN CANADA BEEKEEPER

Subscription \$1.50 per year, \$2.25 two years, \$3.00 three years. In combination with American Bee Journal \$2.50 per year.

Timely topics on western Canadian beekeeping and all the news about Canada and Canadian markets. You cannot afford to be without the most up-to-date information in these days of great changes. Sample copy free. Address WESTERN CANADA BEEKEEPER, 211 Affleck Building, Winnipeg, Manitoba, Canada.

## Package Bees and Italian Queens

We are booking orders for 1949. Only 20% with order, balance 10 days before shipping. We guarantee live delivery of each package shipped.

2-lb. pkg with queen ..... \$3.50  
3-lb. pkg. with queen ..... 4.50  
4-lb. pkg. with queen ..... 5.50

## GASPARD BEE FARM

Hessmer, Louisiana

FOR EVERY LIGHT HAULING JOB



Quick, handy, economical!  
Cushman saves expense, gets  
up to 60 miles per gallon.



SAVES  
YOU  
MONEY

SEE YOUR DEALER OR WRITE DEPT. ABJ

CUSHMAN MOTOR WORKS, INC., LINCOLN, NEB., U.S.A.

## Canadian Bee Journal

Canadian beekeepers have much in common with their neighbors in the U. S. If you are interested in bee activities "North of the Border," send us your subscription NOW. Subscription price, \$1.25 per year in U. S. A.

## CANADIAN BEE JOURNAL

54 Bloor St. West, Toronto 5, Ontario

1911— DUPUIS —1949

### PACKAGE BEES & QUEENS

THREE-BANDED ITALIANS—95%  
baby bees, 5% teachers. Back to pre-war prices: 2-lb. pkg. with queen \$4.00; 3-lb pkg. with queen \$5.00.

DUPUIS APIARIES  
BREAUX BRIDGE, LOUISIANA

## AUSTRALIAN BEEKEEPING NEWS

The Leading Bee Journal of  
Southern Hemisphere is the

### AUSTRALASIAN BEEKEEPER

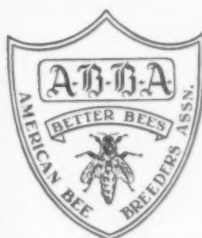
Subscription 8 shillings per year, start any time. Enquire for international money order for 8 shillings (Australian) at your Post Office. Write now to The Editor P. O. Box 20, West Maitland, New South Wales, Australia

## HALL APIARIES

### Italian Bees and Queens

Write for 1949 price list and  
quantity discount.  
Live delivery guaranteed.

P. O. Box 415 Prichard, Ala.



## BETTER BRED QUEENS THREE-BANDED ITALIANS

Twenty-one years of experimenting and stock improvement behind our Better Bred Stock is the answer to our many satisfied customers. Our shipping capacity, 6,000 packages and 10,000 queens. Book your order early and get our best shipping dates. Shipping starts April 1st. Our locality affords plenty of bees early in April. If you need bees early we can make prompt shipment.

2-lb. packages with queens ..... \$4.00  
3-lb. packages with queens ..... 5.00  
Queens ..... 1.20

WRITE FOR PRICES IN LARGE QUANTITIES.

## CALVERT APIARIES Calvert, Alabama

## Are you going to buy an Extractor?

Ask the fellow who owns a "LIFETIME" extractor.  
Let his experience be your guide:

Stuart Brothers, Jerome, Idaho—"It is surprising how smoothly it ran. A 16 year old boy ran it and regardless of weather and the speed at which we extracted there were no broken combs."

C. B. W. Honey Co., Red Lake Falls, Minnesota—"The LIFETIME is the best extractor we have tried. The second day it was used one man and a boy extracted 5,400 lbs. of honey and the combs were nearly dry as could be."

J. R. Barber, Auckland, New Zealand—"My LIFETIME extractor has been a godsend to me. It has performed exceedingly well and hardly ever damages a comb in a locality where much of the crop is very thick and heavy in body."

You Only Have To Try One To Be Convinced

## SUPERIOR LIFETIME EXTRACTORS

4 and 8 Frame

If You Value Your Combs Use a Lifetime

## SUPERIOR HONEY CO.

We manufacture a complete line of beekeepers supplies. Catalog sent on request. Ogden, Utah; Los Angeles, California; Denver, Colorado; Phoenix, Arizona; Idaho Falls, Idaho; Madera, California.

KEEP PERMANENTLY  
Your Files of  
The American Bee  
Journal

Each copy snaps in easily when you are through with it. So as the journals come in you can file them readily. Get two. One for this year and one for the year to come. Blue cloth with name stamped in gold. We guarantee to refund your money if not satisfied. Price postpaid in U. S. A. \$1.50.

American Bee Journal,  
HAMILTON, ILLINOIS



BY THE TIME YOU READ THIS, the first part of February, our bees will be gathering pollen and brood rearing will be well under way. (Considerable pollen is usually available the 15th of January in our locality). The first graft of the new season will not be far off and all of our plants will then be put into action.

This period is one of anticipation, of eagerness to get the ball rolling—to be once again working with the bees.

The above picture shows a portion of our swarm boxes. (Since this picture was taken during the active bee season last summer, they have been treated to a new coat of white paint). When these boxes are taken out of storage, the rush season for us has officially opened. Of course, prior to this our cell builder colonies have been built up to the proper strength and the outyard package colonies worked, and stimulated with sugar syrup.

Everything humanly possible is being done to have our hives boiling with young bees; and our nuclei stocked with vigorous, rarin-to-go queens to supply the needs of the honey producer, the hobbyist, the orchardist and the farmer.

#### ONE OF THE WORLD'S LEADING STRAINS OF LIGHT COLORED ITALIANS

Lot	1949 PRICES					Selected Tested Queens, available after June 1— \$5.00, no discount.
	Queens	2-lb.	3-lb.	4-lb.	5-lb.	
1-5	\$1.55	\$4.75	\$6.00	\$7.25	\$8.50	
5-15	1.50	4.65	5.90	7.15	8.40	
15-25	1.40	4.50	5.75	7.00	8.25	
25-100	1.35	4.40	5.65	6.90	8.15	
100 up	1.20	4.25	5.50	6.75	8.00	

Above package prices include queen. Queenless packages, subtract \$1.35 from the price of package with queen. All queens are airmail, postpaid, but package bees are F. O. B. shipping point and are shipped Express collect. It is preferable to ship package bees by Railway Express, however, they can be mailed and in that event, customers should include postage.

TERMS: Small orders, cash in full. Large orders, 20 per cent deposit, balance to be received two weeks before shipping date. U. S. funds. A 10 per cent discount is allowed on package bees if shipment is to be made after May 20th. A 20 per cent discount is allowed on queens if shipment is to be made after May 20th, and a 25 per cent discount is allowed on queens to be shipped after June 1st.

**THE DANIELS APIARIES : Picayune, Miss.**

## HONEY GIRL APIARIES

**Package BEES and QUEENS When You Want Them**

### ITALIAN BEES AND QUEENS



	1-24	25-49	50-99	100-up
2-lb. package with queens	\$4.50	\$4.25	\$4.00	\$3.75
3-lb package with queens	5.25	5.00	4.75	4.50
4-lb. package with queens	6.00	5.75	5.50	5.25
5-lb. package with queens	6.75	6.50	6.25	6.00

For price of queenless packages, deduct the price of the queens

**W. E. CASE, Proprietor : Moreauville, Louisiana**





# STOVER'S BEES

MAKE 1949 A SUCCESSFUL YEAR BY STARTING THE  
SEASON RIGHT WITH STOVER BEES  
(You Must Be Satisfied)

## ITALIANS OR CAUCASIANS

PRICES		Packages with Queens			
Lots of	Queens	2-lb.	3-lb.	4-lb.	5-lb.
1-24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25-99	1.30	4.25	5.30	6.35	7.40
100-up	1.20	4.00	5.00	6.00	7.00

Queens Air Mailed and/or Clipped at No Extra Cost.

Tested Queens Twice the Price of Untested.

For Queenless Package Deduct Price of Queen

Book Your Order Now—and get the shipping date that you want. No deposit required.  
no obligation on your part.

**The Stover Apiaries : : Mayhew, Miss.**



## CHAMPION APIARIES

Successor in part to  
Jasper Knight & Sons

Three-Banded Leather Colored Italian  
Bees—The Best Honey Gatherers

PACKAGE BEES		QUEENS			
PRICES		Packages including queens			
Lots of	Queens	2-lb.	3-lb.	4-lb.	5-lb.
1-24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25-99	1.30	4.25	5.30	6.35	7.40
100 up	1.20	4.00	5.00	6.00	7.00

For queenless packages deduct price of queen.

No extra charge for queens via AIRMAIL or  
CLIPPING

SAFE ARRIVAL AND SATISFACTION  
GUARANTEED.

**S. M. CHAMPION**  
HAYNEVILLE, ALABAMA

## ITALIAN PACKAGE BEES AND QUEENS

All Shipping Dates Open

	Queens	2-lb. with queen	3-lb. with queen
1-24	\$1.40	\$4.50	\$5.60
25-49	1.30	4.25	5.30
100-up	1.20	4.00	5.00

For price of queenless packages, deduct  
the price of the queens

**SOUTHERN APIARIES AND  
SUPPLIES COMPANY**

Chatom, Alabama

# RICH'S Leather Italian and Caucasian Bees and Queens

LIVE DELIVERY GUARANTEED ON EVERY SHIPMENT

	Queens	2-Lb.	3-Lb.	4-Lb.
1-24	\$1.30	\$4.25	\$5.30	\$6.35
25-99	1.20	4.00	5.00	6.00
100-up	1.10	3.75	4.70	5.65

Please include 10% deposit with order.

THE RICH HONEY FARMS

Jeanerette, La.

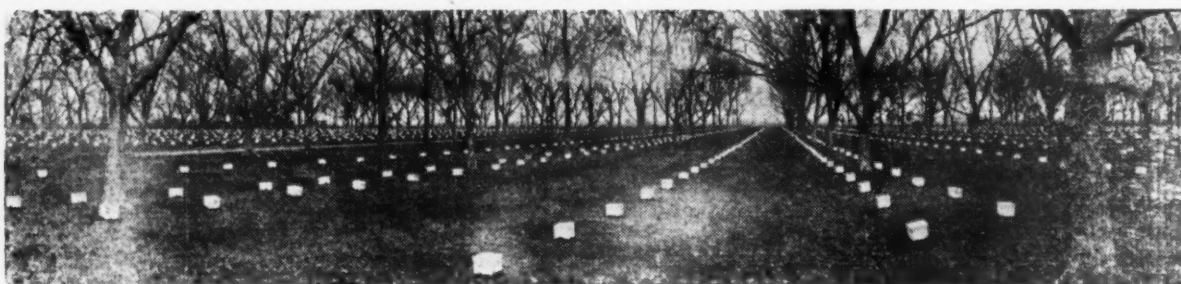


Photo shows a part of one of our queen yards with 10,000 nuclei

## ITALIAN BEES YOUNG QUEENS

RESERVE YOUR 1949  
DATE NOW

No Deposit Required  
For Early Booking.  
Large Queen Orders  
Solicited.



	Queens	2-lb. with queens	3-lb. with queens	4-lb. with queens	5-lb. with queens
1-24	\$1.40	\$4.50	\$5.60	\$6.70	\$7.80
25-49	1.30	4.25	5.30	6.35	7.40
100-up	1.20	4.00	5.00	6.00	7.00

For price of queenless packages, deduct the price of the queens.  
Write for our full folder on package bees and queens.

OVERBEY APIARIES,

Louisiana's Largest Package Bee  
and Queen Shippers

Bunkie, La.

# PACKAGE BEES with Queens

MAY WE RESERVE THE DATE YOU DESIRE FOR YOUR SHIPMENT?

## ITALIANS



	1-24	25-49	50-99	100-up
2-lb. package with queens	\$4.50	\$4.25	\$4.00	\$3.75
3-lb. package with queens	5.25	5.00	4.75	4.50
4-lb. package with queens	6.00	5.75	5.50	5.25
5-lb. package with queens	6.75	6.50	6.25	6.00

## SUNNY SOUTH APIARIES

MARKSVILLE, LA.

I. CLARK, Prop.

### American Rabbit Journal Shows the Way to Success

Gives the latest news and views of the rabbit world—an illustrated monthly magazine of general and educational features. 1 year, \$1.00; 3 years, \$2.00; sample 15c.

American Rabbit Journal  
DEPT. S. WARRENTON, MISSOURI

### LIFE OF LANGSTROTH

By Florence Naille

A complete biography of the inventor  
of the movable frame hive. Cloth bound.

215 pages. \$2.50

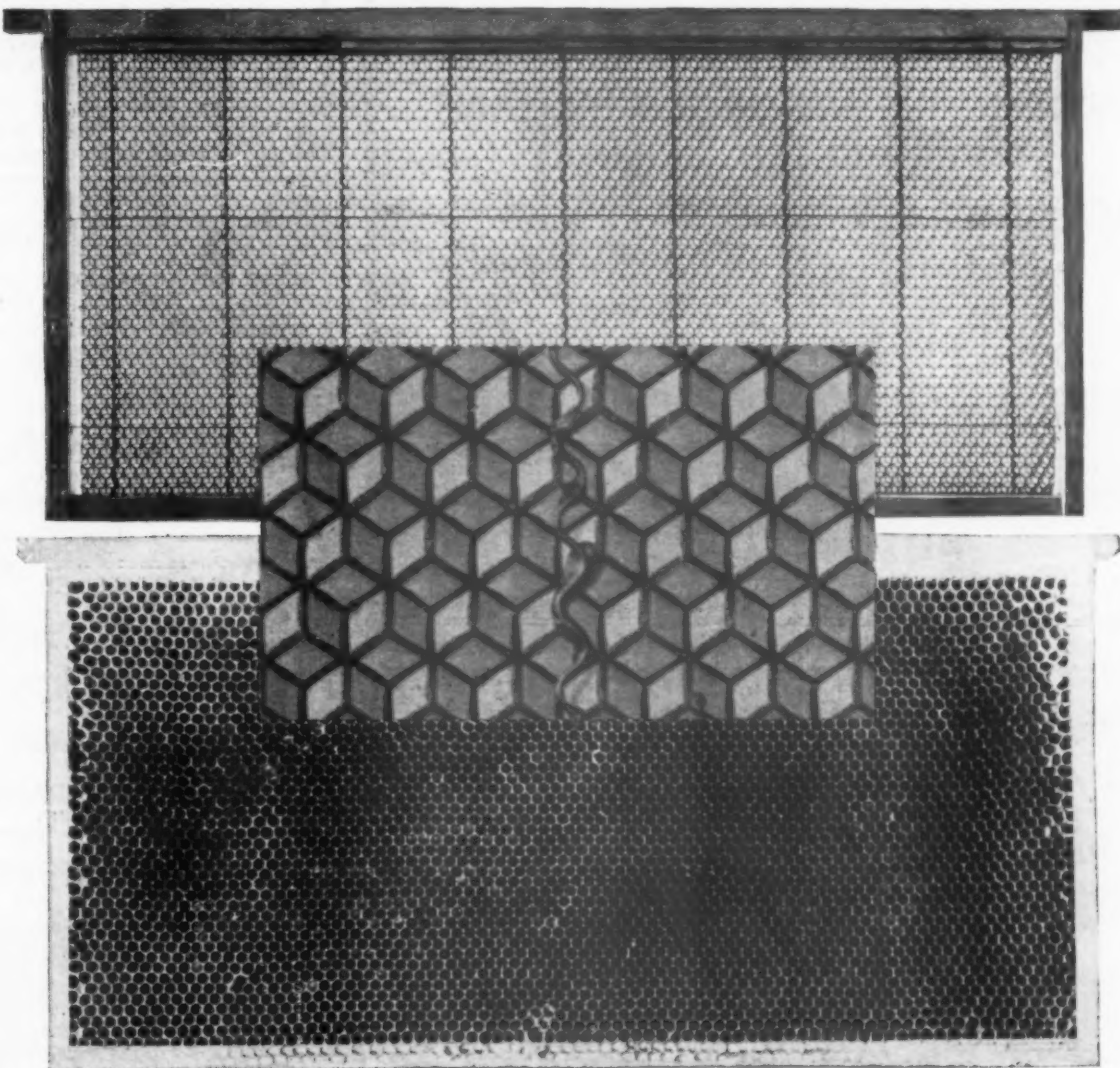
American Bee Journal, Hamilton, Ill.

### WANTED

Thousands of Rabbits  
and other Small Stock,  
Poultry & Birds. Let

"STANDARD RABBIT & PET JOURNAL"  
Bring you the Monthly News of Rabbit,  
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and Other Pets.

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Save money and increase  
your crops with



# DADANT'S CRIMP-WIRED FOUNDATION

Supported with wires of crimped spring-steel through every inch of a pure beeswax sheet Dadant's Crimp-wired Foundation gives you everlasting combs that save you money every year. Good queens lay in them freely, producing all worker brood. The result is large field force and greater crops.

**Dadant & Sons : Hamilton, Illinois**

**DADANT'S FOUNDATION**  
CHOICE OF EXPERT BEEKEEPERS



## PLANT'S PRODUCTIVE VIGOROUS ITALIANS GENTLE AND EASY TO HANDLE

In producing honey in the North we learned what should go into good packages and queens before coming South to raise them.

Now as for years our first consideration is to give the quality and service we would like to receive if we were still on the receiving end.

	1 to 4	25 to 99	100 or more
2-lb. package with queen	\$4.50	\$4.25	\$4.00
3-lb. package with queen	5.80	5.30	5.00
4-lb. package with queen	6.70	6.35	6.00
5-lb. package with queen	7.80	7.40	7.00
Extra queens	1.40	1.30	1.20

For queenless packages, deduct price of queen

Never any disease in our queen or package yards. Health certificate with each shipment. Safe, full weight arrival. Satisfaction guaranteed.

**W. E. PLANT**  
Rt. 2, Hattiesburg, Mississippi



### Honeyflow Bee Feeder

\$2.50 Everywhere in United States.

Look for it at your bee supply dealer.

If he doesn't have it write

**W. O. GOEBEL**  
KNOXVILLE, IOWA

### WANT TO INCREASE YOUR HONEY CROP?

Use our LEATHER ITALIAN BEES and QUEENS

	Queens	2-lb.	3-lb.	4-lb.	All package bees shipped express collect unless otherwise specified. We guarantee live arrival.
1-24	\$1.30	\$4.25	\$5.30	\$6.35	
25-99	1.20	4.00	5.00	6.00	
100-up	1.10	3.75	4.70	5.65	

**EVANGELINE BEE CO.**  
BREAUX BRIDGE, LOUISIANA

### LIGHT COLORED ITALIAN BEES AND QUEENS

	Queens	2-Lb. Bees	3-Lb. Bees	4-Lb. Bees	5-Lb. Bees
1 to 24	\$1.40	\$4.25	\$5.35	\$6.45	\$7.55
25 to 99	1.30	4.00	5.10	6.20	7.30
100 up	1.20	3.75	4.75	5.95	7.05

Terms—\$1.00 per package deposit with order. Balance in advance of shipment.

**B. A. ANDERSON & CO.**      Opp, Alabama

### Italian Package Bees

Top quality northern California bees and queens at reduced prices. Some choice dates still available.

**W. E. CLOUD**  
P. O. Box 84      Keno, Oregon

### Dovetailing Machine

FOR MAKING BEE HIVES AND SUPERS. NOW A SIZE FOR EVERY BEEKEEPER'S SHOP.

DETAILS ON REQUEST.

### Carl E. Johnson Co.

1557 GREGORY AVENUE  
LINCOLN PARK 25, MICHIGAN

### OF COURSE!

WE ARE MEMBERS OF:

Alabama Beekeepers Association  
American Bee Breeders Association

AND SUPPORT

American Honey Institute  
(See our advertisement on page 97 of this magazine.)

**SOUTHERN APIARIES**

AND

**SUPPLIES COMPANY**  
CHATOM, ALABAMA

## IT'S A GOOD IDEA

This is the time to gather up all your old comb and cappings and have them rendered into beeswax before the wax moths consume any part of it. We charge only 2c lb. for rendering when your old comb and cappings weigh 100 lbs. or more (net). 3c on smaller shipments. We pay top price for wax.

We are always buying honey. Send SAMPLE, state how much you have and quote your best price. We remit promptly.

Send for our Money Saving Price List on bee supplies.

## THE FRED. W. MUTH CO.

229 Walnut Street  
CINCINNATI 2, OHIO

**Healthy Italian Queen Bees**  
GUARANTEED LIVE DELIVERY  
Certificate with each shipment.

PRICE \$1.15

**HENRY & SONS**  
BOURG, LOUISIANA

### Modern Beekeeping

The picture magazine of beekeeping. We show you with pictures how to do the job easier, quicker, and better. Special inventor's page.

1 yr. \$1.50; 2 yrs. \$2.50; 3 yrs. \$3.25

**MODERN BEEKEEPING**  
PADUCAH, KENTUCKY

### DIXIELAND'S LEATHER-COLORED ITALIAN BEES AND QUEENS

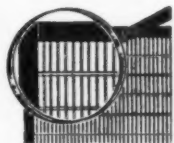
Write for prices and booking dates

**DIXIELAND APIARIES**  
Greenville, Alabama

### THE ONLY WORTHWHILE

### QUEEN EXCLUDER

on the market



Chrysler's All Steel Electric Welded Queen Excluder allows maximum bee passage, better ventilation, more honey production. No wood, no sharp edges to injure bees, no burr combs. New rust proofing process. So durably made and accurately spaced that it is permanently Queen excluding and will last a lifetime. Sales increasing steadily each year. For earliest delivery place your order at once. Send for circular E-1.

**W. A. Chrysler & Son**  
Chatham - Ontario - Canada

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FEATURE ARTICLES—NEWS ITEMS  
MONTHLY TALKS TO BEEKEEPERS

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MEDINA, OHIO

Ship Your  
**HONEY & BEESWAX**  
to us. Top prices paid, prompt remittance. Also welcome your old comb shipments to be rendered into wax at very nominal charge.

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CINCINNATI 2, OHIO

Free Sample Copy  
DROP US A CARD TODAY

**The Beekeepers' Magazine**

3110 Piper Road, Lansing 15B, Mich.  
\$1.00 PER YEAR—Serving the Honey  
Producers of America

### Packages Headed by Those Good Weaver Queens

#### ITALIANS



#### CAUCASIANS

PRICES	2-lb. Pkgs.	3-lb. Pkgs.	Extra Queens
1 to 24	\$4.50	\$5.50	\$1.40
25 to 98	4.25	5.25	1.30
99 and up	4.00	5.00	1.20

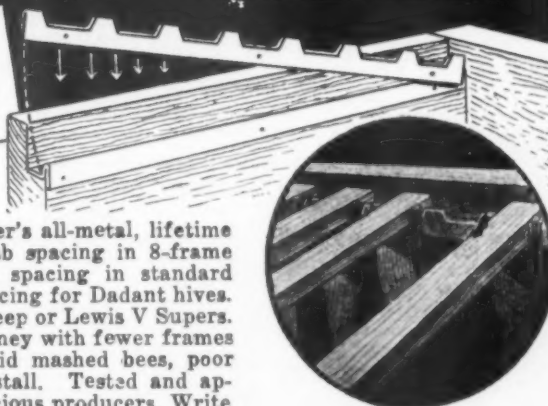
We have a few open dates in April, plenty of dates in May.

**WEAVER APIARIES**

**Navasota, Texas**

### You save ALL WAYS with the STOLLER *Slip-on* FRAMESPACER

Stoller Spacers fit over, or replace, any standard frame rest or tin rabbet. 16 styles and sizes.



Step up profits! Stoller's all-metal, lifetime spacer permits 7-comb spacing in 8-frame hives; 8 or 9 comb spacing in standard hives, and 9-comb spacing for Dadant hives. Made to fit shallow, deep or Lewis V Supers. Get more wax and honey with fewer frames and less work. Avoid mashed bees, poor spacing. Easy to install. Tested and approved by profit-conscious producers. Write for literature and prices.

### STOLLER *Honey Farms* LATTY, OHIO

### Italian Package Bees & Queens For '49

5000 Packages for Spring Delivery at the following prices:

	1-24	25 and up
2-lb. package with young laying queen	\$3.75	\$3.50
3-lb. package with young laying queen	4.75	4.50

Extra queens (any number) \$1.00 each.

**SPECIAL**—1000 4-frame nuclei for late April delivery. \$1.00 per package deposit books your order, balance ten days before shipment is made. We guarantee live delivery, a health certificate with each shipment and service you can depend on.

QUALITY DOES NOT COST—IT PAYS.

**THE WILBANKS APIARIES**

Claxton,

Georgia

### GASPARD'S Quality Italian Queens and Package Bees

We are booking orders for spring 1949 delivery. Only 20% with order, balance 10 days before shipping time. We guarantee live delivery and health certificate accompanies each shipment. Prices as follows:

	1-49	50-up
2-lb. package with queen	\$3.75	\$3.50
3-lb. package with queen	4.75	4.50
4-lb. package with queen	5.75	5.50
5-lb. package with queen	6.75	6.50

Queens \$1.25

**GASPARD BEE CO.**

**Hessmer, Louisiana**

# Classified Advertisements

## BEES AND QUEENS

**BOOKING ORDERS** for package bees and queens. Breeding stock high honey producers. Queens \$1.25 each. Packages 1-24, 2 pounds with queen, \$4.25; 3 pounds with queen, \$5.30. 25-up, \$4.00 and \$5.00. 10% cash with order, balance before shipping. 2% discount if payment in full 30 days before shipment. Greater discounts on large orders. Martz, Rt. 2, Box 826, Vacaville, California.

**BOOKING PACKAGE BEES** with Caucasian or Italian queens. Also queens. Prices upon request. Miller & Evans, Three Rivers, Texas.

**CAUCASIAN PKG. BEES and QUEENS.** 2-lb. packages \$4.00 3-lb. packages \$5.00. Queens, untested, \$1.00. Lewis and Tuery Bee Co., Rt. No. 1, Box 280, Greenville, Alabama.

**LET'S GET TOGETHER** in 1949. If you need package bees and queens, write and tell us how many and when. We will then quote you prices and delivery dates. You have plenty time to write us before you buy. Gult Coast Bee Co., Schriever, La.

**HIGHEST QUALITY** dark Italian queens, 1 to 100, \$1.25 each. Air mail postpaid. Established colonies \$10 each, at our apiary. Atherton Apiaries, Kenedy, Texas.

**ITALIAN PACKAGE BEES and QUEENS.** Three pound packages, \$5.00; over 24, \$4.75. Queens \$1.10. Booking orders from March 20. Dewey Apiaries, Merritt Island, Florida.

**JOE'S ITALIAN BEES and QUEENS** for shipment, after April 20. 3-lbs. with queen, \$4.50; 4-lbs. with queen, \$5.25. Live delivery and health certificate guaranteed. Book order without deposit. Joy Roy Apiaries, Hessmer, La.

**ITALIAN QUEENS** \$1.00 each. Two pound pkgs., \$3.50; 3-lb. pkgs., \$4.50. Every queen guaranteed and shipped Air Mail. Walter B. Leverette, Box 364, Fort Pierce, Florida.

**CARNIOLAN QUEEN BEES** for 1949 spring delivery. Ephardt Honey Farms, Batchelor, Louisiana.

**BREWER'S LINE-BRED CAUCASIAN QUEENS**—Now booking orders for April 1st. Prices, 1-99, \$1.15; 100-up, \$1.00. Member of A.B.A. Brewer Brothers Apiaries, 3616 Caucasian Circle, Tampa 9, Florida.

**GREEN'S PROFIT PRODUCING QUEENS** won't fail you. They are backed by 22 years of breeding better queens. Start shipping about March 15th. Price 90c each. D. P. Green, Rt. 2, Deland, Florida.

**BRIGHT YELLOW** and three band queens. Graydon Bros., Rt. 2, Greenville, Ala.

**CAUCASIAN, CARNIOLAN** Package bees and queens, 1949. 2-lb. pkg., \$4.00; 3-lb. pkg., \$5.00. Untested queens, \$1.00 each. Tillery Bros., Greenville, Alabama.

**THREE-BANDED ITALIAN** bees and queens for 1949. Queens, \$1.00 each. 2-lb. pkgs. with queen, \$3.50; and 3-lb. pkgs. with queen, \$4.50. George O'Neill and Sons, Haines City, Florida.

**GOLDEN ITALIAN PACKAGE BEES** and select queens. Booking orders for 1949. Write for prices. Carolina Bee Farm, Graham, North Carolina.

**I HAVE PLENTY** good Italian package bees at the following prices. 2-lb. pkg. with queen, \$4.30, express collect; 3-lb., \$5.25. Live arrival and satisfaction guaranteed. I give personal service, ample overweight, no drones, health certificate. For truckload lots write for prices. Your patronage appreciated. Deposit \$1.00 per pkg., balance ten days before shipping date, or you may send cash in full. S. J. Head, Crossett, Arkansas.

**BILL ATCHLEY'S** famous bees, queens and nuclei—the best honey producing stock in the U. S.. Untested queens, January, February and March, \$1.50 each; April, May and June, \$1.25 each. Four-frame nuclei with queen, bees, brood and honey, \$6.00 each, 2 in hive body. Will raise you full colonies in your equipment for June 1 delivery. Cheap if order early. Wm. Atchley, 500 E. 9 Street, Upland, California.

## HONEY and BEESWAX WANTED

**WANTED**—Table quality clover honey. Submit price delivered our plant and sample. Schultz Honey Farms, Ripon, Wisconsin.

**WANTED**—All grades comb and extracted honey, large or small amounts. Quote price in first letter. Mail sample. King Honey Co., 326 Bales St., Kansas City, Mo.

**WANTED**—Honey and wax—any quantity. Send samples and prices. Alexander Company, 819 Reynolds Road, Toledo 7, Ohio.

**WANTED** — Extracted honey, white or light amber, in 60's. State price in first letter. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois

**HONEY WANTED**—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1360 Produce Street, Los Angeles, California.

**HONEY AND WAX WANTED.** Mail sample. Advise quantity. Bryant & Sawyer, 2425 Hunter St., Los Angeles, Calif.

## HONEY FOR SALE

900 cans fancy white sweet clover honey, 125 cans light amber, 10 1/2 lb. F.O.B. Trinidad, Colorado. R. L. Morris, Model, Colorado.

**FOR SALE**—125 60-lb. cans of light amber honey, clover and basswood blend, mostly basswood, at 10c per pound. Sample 25 cents. Hesselberg's Honey Farm, Potosi, Wisconsin.

**CLOVER and AMBER HONEY** in new sixties, also 5 pound jars. Walter J. Rink, Port Hope, Michigan.

**LIMITED AMOUNT WHITE CLOVER** 12 cents; light amber 11 cents. Carload buckwheat, best offer takes it. Granulated, packed in sixties. Andrew Mahay, Johnstown, New York.

**CHOICE WISCONSIN HONEY** for your select trade. Myron R. Frisque, 526 S. Van Buren, Green Bay, Wisconsin.

**SEVERAL TONS** of unusually good flavored clover honey in sixties. 13c lb. F.O.B. Flygare Apiaries, Annadale, Minn.

**NEW CROP OF HONEY** shipped daily from producer in Florida. Pure orange blossom, 5-lb. pail \$2.25. Pure Florida cut comb honey. 5-lb. pail \$2.75. No C.O.D. orders; all shipments prepaid. E. R. Raley, Box 1610, Daytona Beach, Florida.

**CLOVER HONEY**, No. 1. white extracted. 16c per lb. in 60's. Lose Brothers, 206 E. Jefferson, Louisville, Kentucky.

**CLOVER HONEY** in new 60-lb cans, 12c. Order from ad. Ohmert Bee Farms, Dubuque, Iowa.

## FOR SALE

**75 TEN-FRAME QUEEN EXCLUDERS**, 45c each. 25 Modified Dadant hives with drawn combs, \$6.00 each. Myron R. Frisque, 526 S. Van Buren, Green Bay, Wis.

**ALBERTA** is a beekeeper's paradise. Over 1,400 tons of honey produced by my outfit in 18 years. Now ready to retire after 40 years of commercial beekeeping. Will

trade this 1,100 four-story colony outfit for U. S. dollars or what have you over a four year period in which I will install in April each year my own package bees, thus assuring success. Information on request. Absolutely no disease. Box 118, care American Bee Journal.

**FOR SALE**—247 colonies of bees with equipment Clyde Cobb, Belleville, Ark.

50 excluders, wood and wire, slightly used, disease free, \$30.00. Crawford Smith, Clayville, N. Y.

110 double 10-fr. colonies, winter stores and packing material included. 400 deep supers, 150 covers, 100 bottoms, 80 excluders, 70 inner covers, etc. 100 nuclei by May 15th in complete single hives with 9 combs. Write for complete information. AFB disease free. Lewis Lawrence, Abercrombie, North Dakota.

**FOR SALE**—One No. 5 Lookout tubeless boiler, 16 ft. stack for same. Used less than 5 days and in perfect condition. Also 75 Kelley hives, with telescope top. All well painted and in good condition. Same number of shallow supers. Price \$6 and \$1.50 respectively. 1 double frame extractor, also double boiler tank \$45.00. W. L. Nunley, Box 232, Booneville, Miss.

**COMPLETE commercial** beekeeping outfit for sale including 600 colonies, trucks, house, shop and other buildings located on 60 acre farm near Ithaca. Everything modern and in excellent condition. Bees and locations may be purchased separately if desired. William Coggs, South Lansing, New York.

**TWENTY COLONIES.** Equipment like new for fifty. Complete honey house equipment. Paul La Plant, Anoka, Minnesota.

**BEE POLLINATION SERVICE** earning \$15 per colony with 200 new Lewis hives. Lack of labor forces sale. Reasonable. Can expand to 1,000 colonies easily. Write: Howard Rasmussen, Tomah, Wisconsin.

**FOR SALE**—150 colonies bees, disease free 1948. 30-fr. extractor, 4 or 5 truck loads supers, cans, pails, etc. Most reasonable offer takes. Alfred P. Johnson, Rankin, Illinois.

500 colony bee business, A-1 equipment, modern honey house, lots of new equipment not yet assembled. All or part. Write for complete details. Louis Farrington, Henderson, Iowa.

**SURPLUS FOR SALE**—600 supers, 300 bodies, 300 metal tops, 300 bottom boards, all 10-frame, painted white, 5 years old, some new. Frames included. Free from disease. Inside when not in use. Trade for honey or cattle \$1,800.00. Fred Wyatt, Oak Grove, Missouri.

**FOR SALE**—Eighty 9-frame hives, twenty-eight shallow supers with comb, twenty colonies of bees, two-frame extractor, twelve-frame power extractor, hive bodies, frames foundation, tops, bottoms, bee escapes two storage tanks, uncapping tank, smoker, etc. Sell all or part, also location with six room house, double garage, chicken house, shop with lathe, bench saw, etc. Basswood territory, located on Wisconsin river at Boscobel, Wisconsin. Mrs. E. J. Ostrander, 120 D St. N. W., Linton, Indiana.

**FOR SALE**—New Loebe geared inch honey pump, never used. First \$28.00 takes it. H. A. Schmitt, Mandan, North Dakota.

400 2-story 10-fr. hives bees and equipment, with or without locations. 200 shallow supers 5 1/2" deep, with inside fixtures for 4 1/4 x 4 3/4 x 1 3/8" comb sections. 2 houses, 2 1/2 acres land, pressure water system. All or part. Located at Blackfoot, Idaho. Crazy Nook Honey Co., 4621 W. 167 St., Lawndale, California.

**FOR SALE**—600 two-story 8-frame hives and 200 two-story 10-frame hives and 400 nuclei. All these are in excellent condition. Will not sell after February 10th. George J. Triphon, 569 34th St., Sacramento, California.

**FOR SALE**—1,600 colony outfit in Montana with all equipment as good as new. New truck, new 40x80 building for shop and warehouse and new home. Will sell everything at a reasonable price. Located in exclusive territory—no other producer in valley. -C. E. Cheeley, Columbus, Montana.



## FOR SALE (Continued)

OFFERING 3,000 colonies of a 5,000 colony outfit in northwestern Minnesota on very favorable terms to a purchaser. Packages and locations furnished if desired. Hopkins Honey Farms, Maringouin, La.

FOR SALE—1,000 colonies bees \$10.00 each. Truck and locations included. Liberal terms. Eugene Walker, Gridley, Calif.

SURPLUS—400 colonies in Florida, full of bees and honey. All or part. Suitable for package bees or honey production. Information on request. Box 1610, care American Bee Journal.

## POSITIONS AND HELP WANTED

WANT JOB WITH BEEMAN. I'm 33 years old, single. Present job farm work. Have had quite a bit of experience with bees but want to learn more about them. Will go anywhere in the U. S. A. and work this coming season for \$50.00 a month and room and board, and give three 10-hr. days free to get acquainted with job and duty. Anyone needing a hand write: Camden Hall, Rt. No. 1, Claudville, Va.

WANTED—Two men to work in our apiaries. Opportunity for advancement. Schultz Honey Farms, Ripon, Wisconsin.

MARRIED MAN 27 would like year around work. Six years' experience throughout the West. Don't drink or smoke. H. L. McDaniel, Polson, Montana.

BEEES FOR LEASE on share crop, also experienced man to work in apiary. Write Box 158, Sunnyside, Washington.

APIARY INSPECTORS. Seasonal work from April to October—\$7.59 a day plus expenses. Automobile required. Inquire Michigan Civil Service Commission, 310 North Grand Ave., Lansing, Michigan.

WANTED—Two helpers with or without experience. Authorized to give on the Job Training. Give references. Real opportunity to make good. Address Box 16, care American Bee Journal.

HELP WANTED—Two or three good men to help in our queen and package yards. Must not drink. References required. Weaver Apiaries, Navasota, Texas.

WANTED—Single man to help operate 900 colonies of bees. Harold E. Gartner, Titonka, Iowa.

HELP WANTED—Experienced man to operate 500 to 1000 colonies. Choice territory, 1st class equipment. Permanent position. Write Box MS, care American Bee Journal.

WANTED for next season—Experienced man to handle apiary. Good opening for right man. West central states location. Write Box 85, care American Bee Journal.

## SUPPLIES

THE ONLY COMB FOUNDATION PLANT in the East. We sell foundation work your wax, render combs and cappings. Twenty-nine years' experience. Robinson's Wax Works, Rt. No. 3, Auburn, N. Y.

PLAIN COMB HONEY SECTIONS, 4 1/4 x 4 1/4 x 1 1/2", in cartons of 500, for \$3.25. F.O.B. St. Paul, Minnesota. Midland Mercantile Co., 92 South Robert St., St. Paul 1, Minnesota.

YOUR WAX WORKED into quality brood foundation, 23c pound; 100 pounds, \$19.00. Fred Peterson, Alden, Iowa.

BEEHIVES, FRAMES, SUPERS. Standard lock-cornered hive bodies; strong, light frames. Satisfaction guaranteed. Price list free. Green Mountain Apiaries, Rt. No. 1, Box 200, Orchards, Washington.

LEWIS BEE SUPPLIES and Dadant's wired foundation. Prompt shipment from stock. Simeon B. Beller, Intercourse, Pa.

OUR FREE BEE SUPPLY CATALOGUE. Lists double boilers, special motors, blowers, etc., not listed by others. We

manufacture bee hives, wired and plain foundation, tanks and extractors, etc. Quick delivery from stock. Walter Kelley Co., Paducah, Kentucky.

CLEAN UP AFB with sulfa. 25 tablets 50c; 50, \$1.00; 100, \$1.50; 1,000, \$6.00. Free Circular, quick shipment. WALTER T. KELLEY CO., PADUCAH, KENTUCKY.

FOR SALE—25,000 mill run Lewis sections 3 3/4 x 5 x 1 3/4 scalloped 4 sides 1/2 inch at \$14.00 per thousand, f.o.b. Hamilton, Ill. Dadant & Sons, Hamilton, Illinois.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries. Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

HIVE BODIES, covers and bottom boards, bee shipping cages and nuclei hives. All supplies new and knocked down. Price list furnished on request. A & B Supply Company, Coffee Springs, Alabama.

## MISCELLANEOUS

KNOW interesting facts concerning the bees of India through the INDIAN BEE JOURNAL, published in English, by The Phupen Apiaries (Himalayas), Ramgarh, Dist. Nainital, U. P., India and obtainable from them. Subs. Rs 7/- or 10 Shillings or 2.25 Dollars per annum. Single copy Rs 1/4/- s. 1/9 or 49 cents (international money order).

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information on range sheep than any magazine published. Subscription \$2.00. Hotel Cactus, San Angelo, Texas.

THE BEE WORLD—The leading bee journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy, post free, 12 cents, stamps. Membership of the Club including subscription to the paper 10/6. The Apis Club, The Way's End, Foxton, England.

## DAIRY GOAT

DAIRY GOAT JOURNAL—Introductory six month \$1—Columbia 2, Mo.

## RABBITS

NEW ZEALAND Red and Champagne rabbits. One of nation's top rabbitries. Circular. Tom D. McIlrath, Montezuma, Iowa.

## SEEDS AND TREES

NEED A HOBBY? Raise a BEE AND BUTTERFLY GARDEN. One packet seed each of twelve good nectar plants \$2.00; 35 for \$5.00. Postpaid. Free circular "SEEDS OF HONEY PLANTS." Melvin Pellett, Atlantic, Iowa.

BASSWOOD TREES, ANISE-HYSSOP 2-year plants, HONEYSUCKLE and VITEX

## HONEY LABELS

Improved designs, embodying color, balance, simplicity, and distinction. Please send for free samples & prices.

**C. W. AEPPLER COMPANY**  
Oconomowoc, Wisconsin

shrubs. See ad page 50 January. Prompt moss packed shipments from our cellars when you can plant. Free illustrated folder describing 70 varieties honey plants, designating those best suited for your section. Nicotlet County Nursery, St. Peter, Minnesota.

PURPLE LOOSESTRIPE, nice flower garden ornamental, naturalizes readily on wet and boggy land—is major source of honey some places. Tiny seed, ounce \$1.00; 1/4 pound \$3.00. Inquire quantity price. Melvin Pellett, Atlantic, Iowa.

RAISE YOUR OWN TREES and shrubs from seed for shade, windbreak, erosion control, etc. Write for free planting guide and price list. Woodlot Seed Co., Norway 1, Michigan.

BIRD'S-FOOT TREFOIL seed, hardy Northeastern grown domestic Certified Broadleaf. Pound \$2.75; five pounds \$12.50. Postpaid. Excellent long lived pasture legume. Inquire quantity prices. Melvin Pellett, Atlantic, Iowa.

## HONEY WANTED

Carloads and less than carloads. Mail sample and best prices in all grades.

**C. W. AEPPLER COMPANY**  
Oconomowoc, Wisconsin

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## BRIGHT YELLOW ITALIAN BEES AND QUEENS

All our bees are bright yellow in color, very gentle to work with, and extremely good honey gatherers. Our queens are bred from carefully selected stock that has proven its qualities, and queen rearing begins the first week of March, a fact which guarantees that all packages of bees are headed by a young queen. We also guarantee live delivery, full weight packages of young bees, a health certificate with each order, shipping on date specified, and satisfaction.

Our shipping date starts first week in April and \$1.00 per package books your order, balance 10 days prior to shipping date.

### PACKAGES WITH QUEEN

2-lbs.	3-lbs.	4-lbs.	Queens
\$3.50 each	\$4.50 each	\$5.50 each	\$1.00 each

**ALVIN J. DUCOTE**

**Hamburg, La.**

# GARON'S

## Package Bees & Queens



GARON'S Better Quality Regular Italians—and Northern-Bred All-Italian Daughters of Tested A.F.B. Resistant Stock. These two stocks are Quality Stock in all respects.

Our dependable Service brings to you full weight packages, packed in light sturdy containers with view of reducing express charges. All orders shipped on desired dates. Live delivery guaranteed.

PACKAGES	QUEENS	1-24	25-99	100-up
2-lb. with queen \$4.00	Regular Italians \$1.25	\$1.20	\$1.10	
3-lb. with queen 5.00	All-Italians D.R. 1.65	1.55	1.40	
4-lb. with queen 6.00				

Write promptly for QUANTITY DISCOUNT on packages and for your desired shipping dates.

For packages with D.R. queens deduct the price of the Italian queen from the package and add the cost of the D. R. queen.

We have important and interesting information regarding our D.R. stock that we would like to pass on to you. Circular on request.

**Garon Bee Co. Donaldsonville, La.**

### POLLEN SUBSTITUTE

	5-Lbs.	10-Lbs.	25-Lbs.	50-Lbs.	100-Lbs.
Brewers yeast Soy flour (expeller) mixed	\$ .75	\$1.50	\$3.00	\$5.50	\$10.00
Brewers yeast	1.50	2.75	5.50	8.50	16.00
Soy flour (expeller)	1.50	1.40	2.25	4.00	7.25
Skim milk, suitable for humans	1.50	3.00	6.50	11.00	21.00

Send parcel post charges if you want shipment by mail. Please allow two pounds extra for packing. All orders sent collect.

M. Y. S.

Bainbridge, New York

## Package Bees

## Italian Queens

FOR 1949

Queens from proven high producing stock with overweight packages of young bees. Choose your shipping date and book your order with price to be agreed on later.

Live delivery, prompt shipment, and complete satisfaction assured when you place your order with us.

**GEO. A. HUMMER & SONS**  
ESTABLISHED 1892 PRAIRIE POINT, MISS.  
Wire or phone Macon, Miss.

## Leather Colored Italians

### Package Bees and Queens

U. S. A. and Canadian Prices

2-lb.	\$4.00
3-lb.	5.00
4-lb.	6.00
Queens	1.25

Foreign countries, please add 20 per cent to regular prices.

**O. K. Anderson & Son**  
Apiaries

Box 193

COFFEE SPRINGS, ALA., U.S.A.

### THRIFTY BEES

BOOKING ORDERS FOR 1949

Combless packages and queens. Three-banded ITALIANS only. REMEMBER—THRIFTY bees are guaranteed to please.

**W. J. Forehand & Sons**  
Fort Deposit, Alabama  
Breeders Since 1892

### EARLY

PACKAGE BEES AND QUEENS  
For 1949

2-lb. pkg. with queen	\$4.00
3-lb. pkg. with queen	5.00

Italians only.

**J. E. Wing & Sons**  
Knights Landing, California

**ROOT BEE SUPPLIES**  
Comb and Cut Comb Packages  
Honey Containers in all sizes.  
Prompt Service.

**Michigan Bee & Farm Supply**  
BOX 7 LANSING 1, MICHIGAN  
Successor to M. J. Beck Co.

### Italian Package Bees and Queens

Live delivery and health certificate guaranteed. Prices: 20% with order, balance 10 days before shipping date. 2-lb. pkg. with queen \$3.75; 3-lb. pkg. with queen \$4.75; 4-lb. pkg. with queen \$5.75.

**DAIGREPOINT APIARIES**  
HESSMER, LOUISIANA

— Advertise in the A-B-J —

## BENNETT BEE FARMS

HATTIESBURG, MISSISSIPPI



### ITALIAN PACKAGE BEES AND QUEENS

of Highest Quality

	1-24	25-99	100-up
2-lb.	\$4.50	\$4.25	\$4.00
3-lb.	5.60	5.30	5.00
Queens	1.40	1.30	1.20

Reserve your shipping dates now for the coming season. We guarantee satisfaction.

**BENNETT BEE FARMS**  
HATTIESBURG, MISSISSIPPI

Every mail brings in more and more orders

for "Silverhide" Ready-mixed Aluminum Paint from beekeepers, located all over the U.S.A. They have found that it really keeps their hives from 10 to 15 degrees cooler in the summer and 10 to 15 degrees warmer in the winter. Write for our circular and prices.

**TUNG OIL PAINT MFG. CO., Inc.**  
BOX 83 ORANGEBURGH, N. Y.

SPRING OF 1949

### ITALIAN BEES AND QUEENS

2-lbs. pkg. bees and queen \$3.75;  
3-lbs., \$4.75; 4-lbs., \$5.75; 20% down,  
balance 10 days before shipping date.  
Guaranteed safe delivery.

### THE STAR BEE FARM

Adolph Guillory, Prop., Hessmer, La.

## J. F. McVAY

JACKSON,

ALABAMA



### GOOD PACKAGES

### GOOD QUEENS

### RELIABILITY

	1-24	25-99	100-up
2-lb. with queen	\$4.50	\$4.25	\$4.00
3-lb. with queen	5.60	5.30	5.00
Queen only	1.40	1.30	1.20

## BEE SUPPLIES

We have a fair stock of everything for the beekeeper and can give prompt service. Send us a list of your spring requirements and we will quote you our best prices.

Ask for our price list.

### A. H. Rusch & Son Co.

Reedsville, Wisconsin

## ITALIAN BEES AND QUEENS

BOOK NOW AND  
BE SURE OF YOUR SHIPPING DATES

2-lb. pkgs. with queen \$3.85; 3-lb. pkgs. with queen \$4.85; Queens each \$1.00. 10% will book your order, balance 10 days before shipping date. Health certificate, and live delivery guaranteed.

### BAYOU BEE CO.

RT. NO. 1, BOX 49, MONTEGUT, LA.

# Queens Package Bees

## CAUCASIAN-ITALIAN

Reared from the best honey-getting strains by the best methods and highest skill. Honest weight—fast service.

Queens	\$1.40
2-lb. package with queen	4.50
3-lb. package with queen	5.60

Regular quantity discounts.

## COFFEY APIARIES

WHITSETT, TEXAS

## THINK!! ACT!!—A Contest for Everybody—Anywhere

Who sends an order for 10 DR queens. Just complete this sentence in not more than 25 words:  
"I like DR queens because....."

CONTEST CLOSES MAY 1, 1949—AWARDS JUNE 1, 1949

1st prize—25 DR queens; 2nd prize—15 DR queens; 3rd prize—10 DR queens;  
Next 5 prizes—1 year's subscription to your favorite beekeeping magazine.

WRITE FOR OUR NEW REDUCED PRICES

## IOWA BEEKEEPERS' ASSOCIATION

STATE HOUSE, DES MOINES, IOWA

## ITALIAN BEES AND QUEENS

	1-9	10 up
2-lb. packages	\$3.60	\$3.50
3-lb. packages	4.60	4.50
Queens	1.10	1.00

We guarantee full weight, prompt shipment, live delivery and health certificate with each order.

Let us make you one of our satisfied customers.

## MITCHELL'S APIARIES

Box 391, Bunkie, La.

## PACKAGE BEES—QUEENS

Now booking orders for this high producing strain of LEATHER COLORED ITALIANS. Queens are reared direct from the egg (not grafted or disturbed). produces more vigorous queens, less supersedure. Order early for choice dates. All packages are young bees and overweight.

We start shipping March 15th. 20% books you.

	1-9	10-49	50-up
Queens	\$1.30	\$1.25	\$1.20
2-lb. packages with queens	4.50	4.30	4.10
3-lb. packages with queens	5.60	5.40	5.20

For queenless packages deduct price of queen.

## NOVINGER APIARIES

Oxford, Florida





# Prices Cut!

We believe lower honey prices necessitate that our customers have lower priced bees in order to stay in business therefore we are co-operating by cutting our prices to the bone.

## NEW 1949 PRICES

	Queens	2-lb. pkg. with queen	3-lb. pkg. with queen
1-24	\$1.15	\$3.90	\$5.15
25-99	1.05	3.75	5.00
100-up	.95	3.40	4.50

## FOUR FRAME NUCLEI

Two, four, six, eight or ten nuclei \$6.20 each  
Oven ten nuclei 6.00 each

NO ORDER TOO LARGE OR TOO SMALL  
TO BE APPRECIATED.

WE SOLICIT CANADIAN ORDERS FOR  
PACKAGES AND QUEENS

We guarantee our combless packages and nuclei to give complete satisfaction in every respect. All shipments are accompanied by a certificate of inspection and are guaranteed to be disease free. Live delivery and shipment on date booked are assured.

Our nuclei consist of four combs containing brood, honey and pollen and two lbs. of bees with a laying queen. All nuclei are shipped in lots of two or multiples of two, and are crated two nuclei in a single ten frame hive body, partitioned in the middle and screened top and bottom.

One third down books order and choice of shipping dates; balance due ten days before shipment. Orders may be cancelled any time before shipping date with refund in full.

Shipments begin April 1st and continue through May.

# Babcock Honey Company

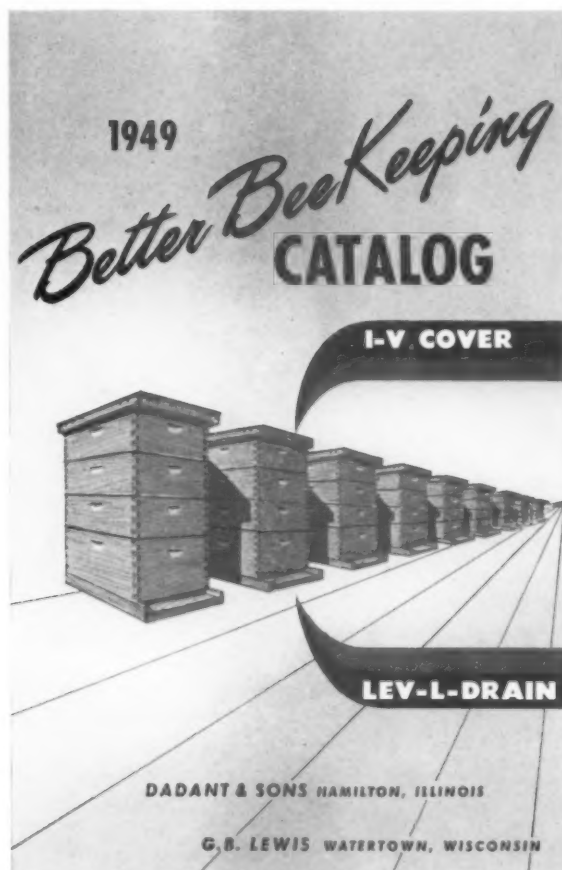
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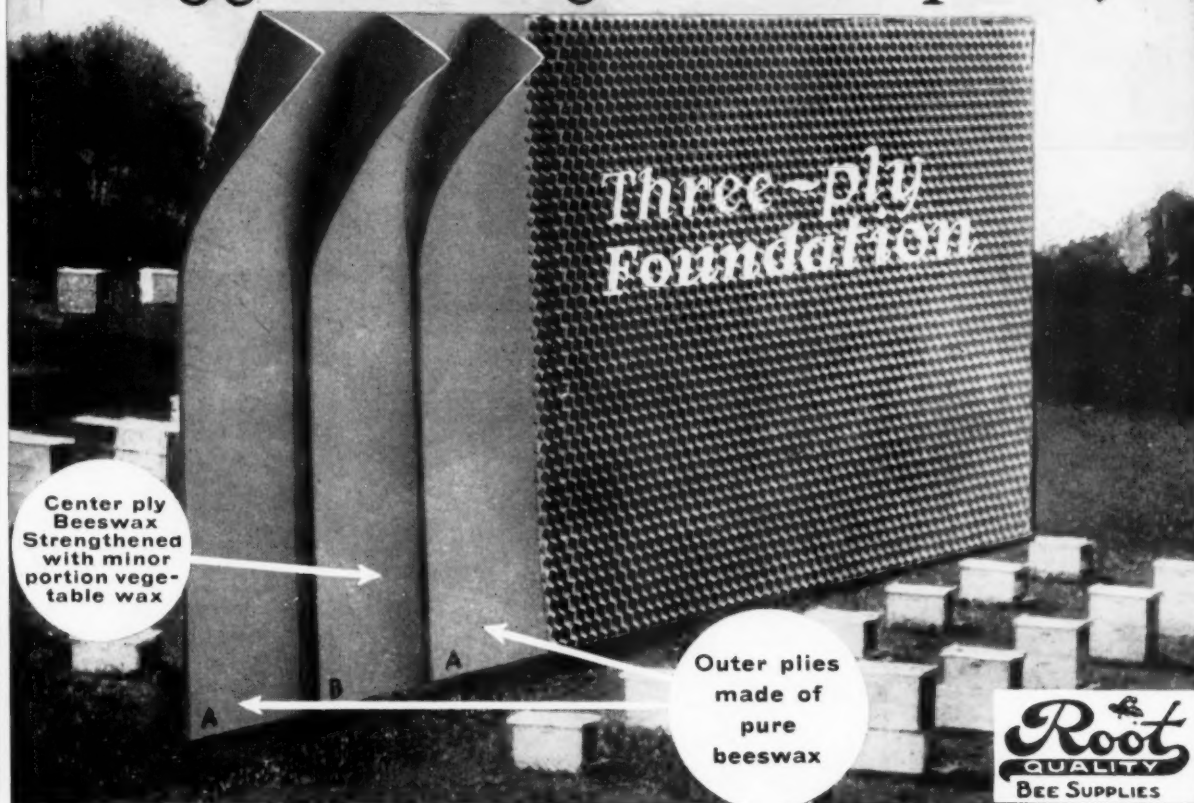
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## ROOT'S 3-PLY FOUNDATION

August 11, 1948—

"One of the most gratifying experiences of my whole beekeeping career was the first use of 3-ply foundation and once started I have never used any other. I now have about 50,000 combs and except for a very small part they are drawn from 3-ply which in my opinion makes just about the best comb obtainable from any foundation.

Properly installed the midrib is always in the center of the frame where it stays with no sagging and no lopping sideways. These three features are important if you want movable combs that really are movable."

Howard Grimble,  
Holcomb, N. Y.

Mr. Grimble's letter is one of many who use 3-ply foundation and find it's tops in the apiary

ORDER FROM YOUR NEAREST DEALER

### THE A. I. ROOT CO.

MEDINA, OHIO

ESTABLISHED 1869

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Bee Supplies

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